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ABSTRACT

This final report discusses the findings of a project that investigated research on the use of educational strategies with students with serious emotional disturbances (SED) for the purpose of communicating to teachers and parents which techniques were effective in serving minority youth with SED. The project reviewed 250 documents to synthesize research findings about the improvement of in-school success and post-school benefits. The data confirmed that youth with SED have poorer outcomes after exiting school; however, graduates of programs for youth with SED appeared to do better than dropouts in the rate of employment. Also, it was found that ethnic group membership did influence rates of representation within programs for youth with SED. While the rate for African American youth in these programs was proportionately greater than their rate in the general population, rates for Hispanic and Asian/Pacific Islander ethnic youth in the programs was proportionately less than their rates in the general population. Outcomes for ethnic youth were also found to be different, with African Americans having lower grade-point levels, missing more school, and having lower rates of employment. Recommendations for programs for minority youth with SED are provided. An appendix includes a discussion of problem areas identified by constituents. (Contains over 650 references.) (CR)

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Synthesize and Communicate a Professional Knowledge Base:
Contributions to Research and Practice
(CFDA No. 84.023E)

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Abstract

In the 1993-94 school year, 414,279 children ages 6-21 were served in programs for youth with serious emotional disturbances, which represents 8.7 percent of all children with disabilities in special education programs under the provisions of the Individuals with Disabilities Education Act (U.S. Department of Education, 1995). Within special education, there is a concern about data that show that youth from minority ethnic groups are represented at a rate that is greater than their percentage with the total school population (Harry, 1992; Reschly, 1988; Wagner, Newman, D'Amico, Jay, Butler-Nalin, Marder, & Cox, 1991).

This project attempted to locate research evidence about success with this population for the purpose of communicating to teachers and parents which techniques were effective in serving minority youth with serious emotional disturbances. The proposed design used a **Systematic Integrative Review** procedure that applies multiple approaches (e.g., meta-analysis, multivocal analysis, and consensus development) to research synthesis and was guided throughout by the active participation of a **Constituency Advisory Committee**. This committee consisted of parents, teachers, researchers, and others who are involved with needs, education, treatment, and benefits/outcomes for minority youth with serious emotional disturbances.

Approximately 250 documents were reviewed to synthesize research findings about the improvement of in-school success (such as reduction of drop-out rates) and post-school benefits (such as increased likelihood of employment and community participation). The Systematic Integrative Review focused particularly on the literature that contained (a) data about youth from minority backgrounds with serious emotional disturbances, (b) measures of both the educational and social benefits and outcomes while in secondary school and after exiting the secondary school system, and (c) information on programs that demonstrated validity and could be recommended to professional staff in school and community and to families of youth for improving benefits and outcomes.

Of the 250 documents reviewed, there were fewer than 20 studies that contained data specific to the outcome (in-school and post-school) areas of this study. These data were so diverse that it was not feasible to conduct a statistical meta-analysis to determine the true size of effect. Due to the nature of the data and the supporting literature, the approach moved more and more to a traditional research synthesis. Available data and sources are extensively documented throughout this report and another 250 references are included in the bibliography as related documents.

The data reviewed confirmed that youth with serious emotional disturbances have poor outcomes after exiting school. The Sixteenth Annual Report to Congress on the Implementation of Individuals with Disabilities Education Act (U.S. Department of Education, 1994) reported that in 1991-92 only 35 percent of the approximately 34,000 students exiting the nation's secondary schools from programs for serious emotional disturbances graduated, while the remaining 65 percent either dropped out of school (about 35%) or the schools lacked sufficient information on what had happened to them (about 30%). Their success four years after exiting school is dismal: only about 50 percent were employed and about 60 percent had higher arrest rates.

Studies that included outcome data typically did not provide information about the specific processes used in the program for youth with serious emotional disturbances. The single reliable outcome is that the graduates of programs for youth with serious emotional disturbances appear to do better than dropouts in the rate of employment. There is also a lack of studies examining the influence of the following moderating variables on outcomes for youth with serious emotional disturbances: (a) family, (b) collaborative community linkages, (c) school atmosphere, and (d) community demographics.

It was found, however, that ethnic group membership did influence rates of representation within programs for youth with serious emotional disturbances. The rate of representation for certain minority ethnic groups differs from their rates within the total school population, but not all minority ethnic groups have disproportionate representation. For example, rates for Hispanic and Asian/Pacific Islander ethnic youth in school programs for serious emotional disturbances is *proportionately less* than their rates in the general population. The proportionate rates for Native American ethnic youth and white ethnic youth in school programs for serious emotional disturbances are *approximately equal* to their rates in the general population. And, the rate for African American ethnic youth in these school programs is *proportionately greater* than their rate in the general population. Despite the findings that some ethnic groups may be under- or overrepresented, it must be remembered that the overwhelming proportion of youth with serious emotional disturbances are from white ethnic groups (approximately 65-70%). And, an even larger proportion (about 76-80%) are males. Note that minority groups as a whole are not consistently in the direction of disproportionateness (i.e., some are higher and some are lower).

Outcomes for ethnic youth are also different. African Americans have lower grade point levels, miss more school, and have lower rates of employment after school (in comparison to the white ethnic group). These data are from the National Transition Longitudinal Study (Wagner et al., 1991), but a confounding problem was that the sample of parents from the African American ethnic group were from lower socioeconomic status than were the parents of the white ethnic group.

The study examined several hypotheses about the influence of ethnic group membership and special education programs for youth with serious emotional disturbances. It could not be determined the degree to which prejudicial decision making in response to race and culture, misunderstanding of cultural norms and behaviors, academic performance of different ethnic groups, differences in the socioeconomic status of the ethnic groups, or measurement error contributed to the higher and lower disproportionate rates of representation for the various ethnic groups.

Finally, the present empirical research base was inadequate for drawing conclusions about which programs are more or less effective for minority youth with serious emotional disturbances. It was recommended that a research agenda be developed by the Office of Special Education that addresses issues regarding (a) validity and reliability of measurement within programs for youth with serious emotional disturbances, (b) examination of factors correlated with ethnic group membership, and (c) the relationship between processes and outcomes from youth with serious emotional disturbances.

Chapter 1

Introduction

The major purpose of this project was to conduct a systematic examination of the literature on minority youth placed in secondary school programs for youth classified under federal definitions of "serious emotional disturbances" or similar state definitions and terms. Various in-school and post-school outcomes were used as criteria to determine which programs and practices were more effective for minority youth. The practices and techniques of focus were those related to (a) identification and assessment of minority youth, (b) classification and placement of minority youth, and (c) remedial education, behavioral interventions, and other treatments.

A systematic integration of the literature base on special education programs for youth with serious emotional disturbances was expected to provide useful knowledge to parents and teachers in the "front lines" who deal with real life issues in their struggle to assist youth with disabilities to benefit from and complete schooling. For many of the families with adolescent sons and daughters who experience serious emotional disturbances, and for the practitioners in and outside schools who work with these adolescents and adults, there are parallel concerns regarding what will happen to these youth when they leave school, either by graduation or as school dropouts: Will they have acquired the necessary skills that would allow them to live independently within their communities? Will they leave with connections to the community services that they will in all likelihood need in order to profit from the community's resources and derive equal opportunity and benefits?

The study conducted a systematic analysis of special education research on youth with serious emotional disturbances and related literature in an effort to identify strategies that practitioners and family members may apply to increase the likelihood that youth with serious emotional disturbances[1] will successfully complete high school and benefit from participation as young adults in the society. The synthesis paid particular attention to identifying strategies specifically applicable for youth and families from minority background.

There are major concerns, both public and professionally, about the field of special education. Some concerns are special education's effectiveness (*U.S. News & World Report*, "Separate and Unequal," December, 1993), that males and blacks are disproportionately represented in special education programs across the nation (Artiles & Trent, 1994; Anderson, 1988; Arcia, Serling, & Gallagher, 1992; Irvine, 1990; National Black Child Development Institute, 1986), the system's disincentives to mainstreaming (Paul, 1985), and its classification system for labeling and segregating these students from their peers without identified disabilities (e.g., Ysseldyke, 1987; Smith, Wood, & Grimes, 1988).

There are several major themes that affect contemporary special education, but probably those that run through all issues are ones that question the efficacy and equity of the system (Kauffman, 1993a), which are especially relevant for the population of youth with serious emotional disturbances whose behaviors often already set them apart from their fellow students. These criticisms have resulted in blunt questions with few definitive answers:

---

[1] Note that this term will be used rather than "Behavioral Disorders," even though several efforts are currently underway to change the federal definition (e.g., see Forness' and Knitzer's 1992 discussion).

- What is the evidence that segregated programming improves student learning and capacity to deal with disability? What value is there in labeling students as seriously emotionally disturbed? Are there valid reasons why minorities and males are overrepresented in programs? Are programs that account for cultural differences more or less effective? When and how does family and community involvement aid in developing individual capacities to achieve and complete school? Does classifying promote equitable and efficient use of teachers and other resources in developing skills for meeting disability needs? How effective is special education in preparing students for adjustment to the community? Should special education programs exist at all? If so, where and with whom are such programs effective? Do schools make appropriate use of community resources while students are still in school? Can schools implement the transition requirement of the Individuals with Disabilities Education Act in an effective way? Can schools form effective collaborative relations with post-secondary resources, including employers? What will be the effect of new legislation on a mainstreamed school-to-work transition effort? What alternative education structures are more effective for youth who are not benefiting from traditional schools (e.g., at-risk)?

The 1992 *Report to Congress on Implementation of Individuals with Disabilities Education Act* by the Department of Education and a recent topical review issue of the *Journal of Special Education* (Hallahan & Kauffman, 1994) evaluated progress made in special education since Dunn's (1968) and Deno's (1970) classic reviews. They concluded that in many areas of special education little progress has been made in the past 25 years. Though these reviews provide analyses and summaries of the issues and arguments that appear to be behind such limited progress, very little attention is given to issues surrounding the needs of students with serious emotional disturbances or how to improve outcomes for youth with serious emotional disturbances.

Serious Emotional Disturbance

The topic selected for synthesis of the literature was that of the impact of public education on preparing youth with serious emotional disturbances to enter into society. While most reviews on special education indicate that the debate on labels may be of little importance, the proper assessment and early intervention with this population may be critical. The range of behavioral and social problems represented within this category is unusually broad. The range includes youth with emotional disturbances who may be too fettered by the school regime to function (ecological "bad" matches). Others may display psychotic behaviors that endanger themselves and/or others and fill volumes on childhood disorders in psychology and psychoanalysis. And another segment of this population appears to have aggressive behaviors that are difficult for them to control. A primary intent of the definitions is to specifically identify those youth with conduct disorders who can be served in school settings or those students who are significantly maladjusted that they in all likelihood could not be taught without considerable professional services beyond those of special educators.

Definitions

The federal definition for serious emotional disturbances dates back to 1977, with basically no changes made to it because there has been little agreement on whether an ecological, educational, behavioral, or psychodynamic perspective should be applied in treating the disturbance (Paul, 1987). The federal definition of serious emotional disturbance is relatively short:

> (I) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance: (a) an inability to learn which cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behavior or feelings under normal circumstances; (d) a general pervasive mood of unhappiness or depression; or (e) a tendency to develop physical symptoms or fears associated with personal or school problems.
>
> (ii) The term includes children who are schizophrenic. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed. (*Federal Register*, vol. 42, no. 163 [1977]: 42478, as amended in *Federal Register*, vol. 46 [1981]: 3866)

While federal legislation uses the term "serious emotional disturbance," states have used various other terms, including seriously emotionally disturbed, emotionally conflicted, seriously emotionally handicapped, emotionally handicapped, socially and emotionally handicapped, social or emotional maladjustment, personal and social adjustment problems, emotional disorders, behavioral disorders, severe behavior handicap (Kauffman, 1985). Several writers (e.g., Bowers, 1982; Kauffman, 1993b; Masters, Mori, & Mori, 1993; Wood, 1985) have suggested that these terms are too inclusive and confuse the issues of selection, differentiation, and treatment. To them, "behavior disorders" should be used to refer to the milder forms of the emotionally disturbed category under the federal definition and would be more descriptive of the youth served in schools.

Scope of the Problem

Of the three major categories of youth with disabilities in school (learning disabilities, mental retardation, and emotional disturbances), students covered by an emotional disturbance label have the greatest diversity of characteristics. Youth included under serious emotional disturbances may exhibit behaviors that range from social rebellion to psychotic episodes. Of the nearly 5 million youth classified as having a disability, 8 to 10 percent of this population, or about 400,000, have been identified as having serious emotional disturbances (Valdes, Williamson, & Wagner, 1990; U.S. Department of Education, 1992; U.S. News & World Report, 1993). Feagans (1987) suggests that many youth with learning disabilities also exhibit symptoms of serious emotional disturbances and that many youth with serious emotional disturbances could also qualify under the learning disability category.

Valdes et al. (1990) described youth with emotional disturbances as being primarily male (76.4%), overrepresented by minorities (32.9%), and coming from lower socioeconomic status families (70.4% from households earning less than $25,000). And the rates of youth with serious emotional disturbances dropping out of school and being arrested are the highest among all special education categories.

The full impact that these youth may have on society may not be fully known because follow-up research on such youth is not common. Many of these youth are difficult to locate and may refuse to participate in any survey activity especially if they have dropped out of school. It is probably not likely that as these youth become adults they will voluntarily contact post-secondary adult services such as vocational rehabilitation, community mental health, vocational technical education, or employment services. Many of these youth who continue to drop out of school (and society after high school?) are likely to have increasing contacts with the judicial and correctional system, due in large part to the untreated or uncontrolled problems stemming from their emotional difficulties and history of unsuccessful adjustments.

Outcome Focus for Youth With Serious Emotional Disturbances

At the present time, general education is under scrutiny for its effectiveness, and for over 25 years special educators have argued for and against the continuation of special education (Dunn, 1968; Deno, 1970; Hallahan & Kaufmann, 1994). Youth with serious emotional disturbances present significant problems to the school system, and perhaps it is because their behavior can be so disruptive that programs for these youth are even more questioned because of the perceived or real lack of effectiveness.

For youth with learning disabilities or mental retardation, their disability presents a challenge to the acquisition of knowledge and skills due to problems associated with the learning process. Consequently, it would seem logical that the schools should play the primary role in serving these youth by resolving these educational disabilities. For youth with serious emotional disturbances, the disability does not lie in primary learning processes, but instead, in their readiness and willingness to fully participate and benefit from educational programs. School staff are not trained well in responding to these problems, nor is the school setting designed to be a primary therapeutic or treatment structure to address the disability problems unique to this population. Classrooms and the school property are more similar to employment settings in regard to "reasonable" accommodations. The primary purpose of school is to educate, and the primary purpose of support programs such as special education is to provide reasonable accommodations to the educational process. The dilemma for schools is that not only do they lack the competencies or resources to treat such disabilities but this population can present problems for the entire school. Thus, some schools have adopted what has been termed a "curriculum of control" for such youth (Knitzer, Steinberg, & Fleisch, 1990a).

Despite the seemingly apparent importance of school outcomes to the public and other non-educational professionals, extensive measurement and debate of outcomes for youth with disabilities had not begun in earnest until the mid-1980s with the emphasis on Transition From School to Work by the Office of Special Education Programs. The apparently poor outcomes of transition from school to work and community life for such youth (Hasazi, Gordon, & Roe, 1985b; Mithaug, Horiuchi, & Fanning, 1985) led to efforts to include youth with disabilities in outcome measures. Major sources of outcome measures include the National Longitudinal Transition Study (Wagner, Newman, & Shaver, 1989), the National Center for Educational Outcomes (Ysseldyke, Thurlow, and Gilman, 1993), and data submitted by the states to the Office of Special Education. All of these efforts are used in the annual reports (e.g., the latest is the Seventeenth in 1995) to congress on the Implementation of the Individuals with Disabilities Education Act, which is the continuation of Public Law 94-142 originally passed in 1975 as the Education for All Handicapped Act.

The effort to measure outcomes for youth with disabilities was given considerable impetus by the National Center for Education (Ysseldyke, Thurlow, & Gilman, 1993) and their importance is succinctly stated by Wagner, Blackorby, and Hebbeler, 1993 (*italics added*):

> Concerns that outcomes are *poor* drive

> moves to reform educational structures and instructional practices and to set higher standards for student achievement. Concerns that outcomes are *poorly measured* drive the current emphasis on revamping assessment practices. Concerns that we *emphasize the wrong ones* drive debates regarding what we want for our students, what they are to learn, and how differences in students' goals and abilities can be accommodated in outcome oriented education. (p.1-1)

Another important concern and one of the major focuses of this project was:

> Concern that outcomes are *unequal for different racial/ethnic groups* and the hope that investigation of such would lend to a greater understanding of how to make education equal for all.

This project was designed to search the literature for empirical outcomes from programs for minority youth with serious emotional disturbances and to analyze these outcome data to determine differences in effectiveness among the various approaches and practices.

Overview of the Project

This project's objectives were designed to accomplish the requirement for conducting a comprehensive investigation of the literature. The project implemented rigorous social science method(s) for synthesizing the professional knowledge base utilizing a hybrid of narrative and meta-analytic reviews based on several sources (Cooper, 1982, 1984, 1989; Glass, McGaw, & Smith, 1981; Huberman, 1990; Hunter & Schmidt, 1990; Ogawa & Malen, 1991; Rosenthal, 1991; Slavin, 1984, 1986, 1990).

A Systematic Integrative Review procedure was employed that applies multiple approaches to synthesize and integrate quantitative (e.g., meta-analysis), qualitative (e.g., multivocal analysis), and expository literature (e.g., consensus development). This review procedure is a generalized approach for ensuring rigor, replicability, and validity and followed the five traditional steps for all scientific studies: (a) Problem Formulation (hypothesis development), (b) Data Collection (search of the literature), (c) Data Evaluation (organizing and coding the evidence for data analysis), (d) Data Analysis and Interpretation (testing the hypothesis and synthesizing the findings for making valid conclusions), and (e) Public Presentation (translating the findings into useable strategies and getting those strategies out to consumers).

Project Objectives

The project employed the Constituent Driven Research to conduct this systematic integrative review under the guidance of a Constituent Advisory Committee whose members consisted of parents of youth with disabilities, education professionals, mental health professionals, and researchers who had direct experience with youth with serious emotional disturbances. This committee assisted in all phases of the research in order to pursue the following project objectives:

1. Identify valid and practical strategies that professionals can use to improve the benefits and community outcomes for youth from minority backgrounds with behavioral disorders.

2. Identify valid and practical strategies that families of youth with behavioral disorders can use to improve school participation and community outcomes for their children and young adults.

3. Package information on valid and practical strategies in formats accessible to both professionals and families.

4. Disseminate information packages directly to professional and parent networks as well as through other traditional networks used by researchers, administrators, public agencies, and policy makers.

The Conceptual Framework for the Project

The Committee's initial meeting was in February of 1995 to examine the issues within the scope of the project in order to develop hypotheses. Out of this effort came a conceptual framework for pursuing the project objectives. One of the important aspects of the project was that it was not to be just another review of the literature, but it would examine the research base to provide empirical support for evaluating the effectiveness of various processes in which youth with serious emotional disturbances are involved. This framework, given in Figure 1, focuses on several key areas.

Educational Practices and Intervention Strategies

The framework included examining how youth with serious emotional disturbances are identified as potentially having a serious emotional disturbance, the assessment processes once they have been identified, the way in which they are classified, and the types of educational placements in various settings (Least Restrictive Environments). Of particular interest were the effectiveness of educational strategies and therapeutic interventions that youth with serious emotional disturbances received.

There are extensive techniques that have been recommended for use with youth with serious emotional disturbances that are described in a number of different sources. For example, there is the Council of Exceptional Children's mini-library on youth with serious emotional disturbances and youth at risk. In addition, Wang, Reynolds, and Walberg's *Handbook of Special Education, Volume 2* (1988), has several excellent chapters on youth with serious emotional disturbances. In addition, Kauffman, Lloyd, Hallahan, and Astuto (1995) have an excellent source on placement issues with youth with serious emotional disturbances. These works are authored by some of the leading professionals in the field and were reviewed for their research content. These references are a resource for concepts, reviews, description of practices, and policy discussions and are highly recommended for reading. They are overviews, reviews of the literature, and guides rather than descriptions of original research studies.

Table 1-1 lists the various techniques referred to in this literature. The major headings for the various approaches include:

- *Behavior Enhancement* - methods for increasing the likelihood that a behavior will occur again by following the behavior with a reinforcing event. These methods rely on different techniques for reinforcing desired behaviors utilizing basic reinforcing stimuli (edible/sensory) through activity and social reinforcers to more sophisticated structured relationships such as behavior contracting, token economies, or level or point systems.

- *Behavior Reduction* - methods for decreasing the likelihood that a behavior will occur again by arranging undesirable outcomes. This area is the opposite of reinforcing behavior by attempting to eliminate reinforcement (extinction), to pair unpleasant consequences to occur contingent with the undesired behavior to reduce the frequency of that behavior (aversive conditioning), or to follow the behavior with aversive events (punishment). This strategy includes the use of strong disciplinary measures as well as others that are potentially harmful and may be legally questionable practices (aversive conditioning and physical aversives).

Figure 1. Empirical Support for Improving Outcomes for Minority Youth With Serious Emotional Disturbances

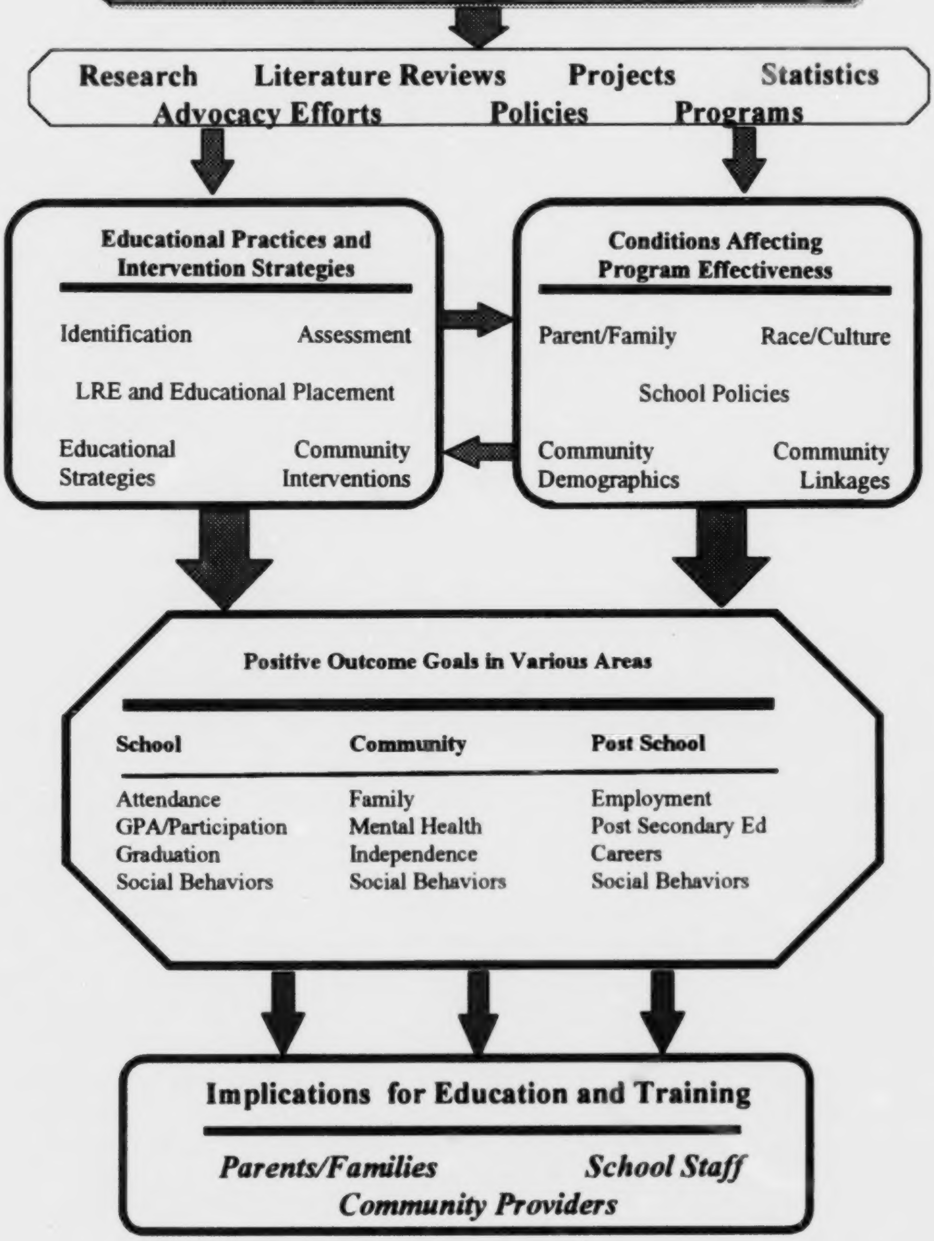
Research
Literature Reviews
Projects
Statistics
Advocacy Efforts
Policies
Programs
Educational Practices and Intervention Strategies
Identification
Assessment
LRE and Educational Placement
Educational Strategies
Community Interventions
Conditions Affecting Program Effectiveness
Parent/Family
Race/Culture
School Policies
Community Demographics
Community Linkages
Positive Outcome Goals in Various Areas
School
Community
Post School
Attendance
GPA/Participation
Graduation
Social Behaviors
Family
Mental Health
Independence
Social Behaviors
Employment
Post Secondary Ed
Careers
Social Behaviors
Implications for Education and Training
Parents/Families
School Staff
Community Providers

Table 1-1. Strategies and Techniques for Youth With Serious Emotional Disturbances

Area	Source
Behavior Enhancement	
Edible/Sensory Reinforcement	Nelson & Rutherford, 1988
Tangible Reinforcement	Nelson & Rutherford, 1988
Activity Reinforcement	Nelson & Rutherford, 1988
Social Reinforcement	Mathur et al., 1996
Behavior Contracting	Nelson & Rutherford, 1988
Token Reinforcement/Economies	Mathur et al., 1996
Level Systems	Johns et al., 1996
Behavior Reduction	
Extinction/Withholding Reinforcers	Nelson & Rutherford, 1988
Differential Reinforcement	Polsgrove, 1991; Nelson & Rutherford, 1988
Timeout	Polsgrove, 1991; Johns et al., 1996
Response Cost	Polsgrove, 1991; Nelson & Rutherford, 1988
Overcorrection	Polsgrove, 1991; Nelson & Rutherford, 1988
Aversive Conditioning	Polsgrove, 1991; Nelson & Rutherford, 1988
Physical Aversives	Nelson & Rutherford, 1988
Corporal Punishment	Polsgrove, 1991; Nelson & Rutherford, 1988
Cognitive Behavioral	
Behavioral Contracting	Mathur et al., 1996
Self-Control Strategies	Rutherford et al., 1996
Self-Monitoring	Carpenter & Apter, 1988
Self-Reinforcement	Carpenter & Apter, 1988
Self-Evaluation	Carpenter & Apter, 1988
Anger Management	Rutherford et al., 1996
Cognitive Behavior Therapy	Nichols, 1996 (Clear Thinking)
Social Cognitive	
Social Skills Training	Carpenter & Apter, 1988; Rutherford et al., 1996
Modeling	Mathur et al., 1996
Social Problem Solving	Carpenter & Apter, 1988
Self-Instruction	Carpenter & Apter, 1988
Transition School to Work Curriculum	Bullis & Gaylord-Ross, 1991
Teaching Strategies	
Cooperative Learning	Carpenter & Apter, 1988; Rutherford et al., 1996
Peer Tutoring	Simpson, Myles, Sass, and Kamps, 1991
Direct Instruction	Lloyd, 1988
Affective Education	Carpenter & Apter, 1988
Life Space Interviewing	Carpenter & Apter, 1988
Others	
Gang Identification & Prevalence	Johns et al., 1996
Responsibility-Based Discipline	Johns et al., 1996
Violence Prevention	Van Acker, 1996; Johns et al., 1996

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*Most of these are from the Council of Exceptional Children Mini-Library Reference and Handbook of Special Education: Research and Practice (Volume 2).

Corporal punishment is not a legal recourse for school districts but may occur as part of the process with adjudicated youth or in community with peers and others.

- *Cognitive Behavioral* - methods for teaching students to control their own behavior. These self-control techniques are based on first providing information to students about their behavior, how to monitor their behavior, and how to self-correct. Many programs often go on to apply these techniques to complex problems such as self-management of anger and aggression, and others have attempted to apply cognitive behavior therapy in an attempt to influence the thinking process of these youth.

- *Social Cognitive* - methods for teaching students social skills and social decisions. Many kinds of social skills training programs are available to educate youth with serious emotional disturbances about basic social constructs and how to learn to apply these normative responses in their own lives.

- *Transition School to Work Curriculum* - for older youth, transition curricula have been developed to assist them to prepare and enter the world of work. While all youth benefit from this training, it is likely that some youth classified as seriously emotionally disturbed will respond very positively to this area. For these youth, the school and its environment present a confining structure. Vocational training and preparation for work may provide a way to regain their interest and assist them to make satisfactory adjustment to the community.

- *Teaching Strategies* - these include newer strategies directed toward increasing a student's interest, involvement, and skill acquisition. Strategies include peer tutoring, learning in cooperative groups, more direct instruction rather than verbal, education about emotions, and teaching life skills based on the student's experiences.

- *Others* - these are other trends mentioned in the literature that are being used with youth with serious emotional disturbances and recognize the potential overlap with students at-risk. These approaches address the competing influence of gangs and the need to provide discipline and prevent violence in the schools.

The approaches vary from the reliance on behavior management techniques to cognitive mediation of behavior through the teaching of critical thinking skills. The efficacy of these approaches in classroom settings has been difficult to assess. MacMillan and Kavale's (1986) review of educational interventions found that these programs "do not adhere rigidly to the tenets of theoretical models but rather take a more pragmatic approach based on the an eclectic combination of intervention strategies derived from the theoretical models" (p. 59).

Conditions Affecting Program Effectiveness

All of these processes were to be examined in relation to the data found in the research. It was possible, however, that other factors could have an impact on the effectiveness of these primary practices and strategies. Even though many techniques and programs may be effective in controlled clinical and experimental settings, they might be less or more effective depending on the conditions surrounding the students in their school, home, and community. Specifically, empirical data were sought about the potential impact of the following areas:

- *Sensitivity to Cultural Diversity.* Practices must be applied in a culturally appropriate environment that is free of racial stereotypes and prejudices; that applies specific language and assessment criteria to recognize the influence and power of the individual's racial, cultural, ethnic, and socioeconomic status background; and translates or modifies basic principles accordingly.

- *Family/Parent Involvement.* Practices must recognize that the student is part of a family structure that must be included in the intervention process deemed relevant for the education and treatment of specific emotional disturbances. The family should not be blamed, but its resources and structure should be evaluated for strengths to assist the individual education and transition plans.

- *Community Linkages.* Practices must recognize the need for collaboration with mental health and other community resources to ensure success. If a student does indeed have a serious emotional disturbance, it must be acknowledged that teachers are not qualified to "treat" this disability. The school must, however, deal with the educational and behavioral consequences of this disability and play an extremely critical role in early detection and referral, while their educational programs should be consistent and compatible with the treatment program.

- *School-Wide Conditions.* In addition, it was expected that several moderator variables within the school would have the potential to have an impact on the effectiveness of these techniques. Such factors may be the school climate, leadership, expenditures per pupil, administration, and policies on mainstreaming.

- *Context of the Community.* It was also recognized that schools differ from state to state and community to community. The demographics of the community surrounding the school district were also expected to have potential impact on the implementation and resulting outcome of these practices. Such factors could include, for example, socioeconomic status, cultural diversity, population size and density (rural and urban), employment rates, and the tax base of the community.

Positive Outcome Goals in Various Areas

The evidence sought to judge the effectiveness of these programs were outcome measures occurring in school and those occurring after exiting secondary schools. The **In-School Outcomes** include evidence that a program/practice/technique affected:

- *Movement in Least Restrictive Environments.* Primarily changes in educational placement that result in more inclusion such as from self-contained classroom to general education, movement to public school from a separate school, movement from juvenile facility to public school, as well as the reverse.

- *Participation in School.* There are several indicators in this area such as increased GPA, increased course completion, increased attendance, fewer suspensions or expulsions, and increased social participation. Also considered may be increased participation in sports and other extracurricular activities.

- *Exiting Status.* The primary indicators are increased graduation rates (diploma, certificate, GED) and decreased drop-out rate.

- *Arrest and Community Participation.* The indicators in this area are those of community adjustment while in school with the primary indicator being that of arrest and incarceration rate. Another major area is that of vocational participation including employment.

- *Other.* The search was left open for other measures that might be considered relevant to success or failure in-school.

The **Post-School Outcomes** include evidence that a program/practice/technique affected:

- *Employment.* Of concern within this area are wage levels, hours worked, type of work, and other characteristics of quality employment.

- *Post-Secondary Education.* Increased attendance at any type of post-secondary educational setting.

- *Arrest and Community Adjustment.* Data on arrest rates and general success in the community (living arranged, social engagement, etc.).

- *Other.* The search was left open for other measures that might be considered relevant to success or failure in school.

The Research Approach and Research Hypotheses

This grant was funded to identify empirically based techniques and strategies that could be recommended for adoption by teachers and parents. The applied research paradigm utilized in this study involves the constituents or targets of the research in the conduct of the study from the problem identification to dissemination of results. The researchers served as technical consultants to constituents. This process, which is referred to as "Constituent Driven Research," is more fully explained in the next chapter.

One of the primary focuses of this project was the equality of special education programs for minority youth with serious emotional disturbances. In addition, the conceptual framework developed out of the committee's identification of the problem area served as the guide for other hypotheses that were to be tested in this study. The task was to use outcome data to identify techniques that were effective based on positive outcomes and identify other techniques that had less desirable outcomes in comparison to those associated with positive outcomes. Based on tying the processes to outcomes, the next step was to determine whether the presence or absence of moderating variables would have an effect on the outcomes. The expectation was that empirical data would be found and the techniques clearly identified. The analysis, then, could examine the influence of such variables as family involvement, cultural competency, community linkages, school climate, and community characteristics. There were three broad hypotheses:

1. Are the prevalence rates for youth of various ethnic groups different, and if they are, what causes the differences in these rates?

2. How effective are the programs for youth with serious emotional disturbances as measured by comparison of mean effect sizes of in-school and post-school outcome criteria?

3. What effect does the presence or absence of the various moderator variables have on the effectiveness of these programs?

By answering these research questions, the results could be used to make recommendations to parents and teachers about which techniques to adopt and which techniques to avoid. These recommendations were to made in light of the environments of the family, school, and community. In the next chapter, the methodology for conducting the Systematic Integrative Review is detailed.

Chapter 2

Method

The design for synthesizing the literature followed the stages of a Systematic Integrative Review process, which included the five phases or stages patterned after Cooper (1989), but was modified for applicability for both narrative and quantitative meta-analysis.

Systematic Integrative Review

The five stages include (a) **Problem Formulation** (hypothesis development), (b) **Data Collection** (searching the literature base), (c) **Data Evaluation** (organizing and coding the evidence upon which conclusions will be based), (d) **Analysis and Interpretation** (hypothesis testing and developing syntheses to provide the summary evidence for the conclusions), and (e) **Public Presentation** (translating findings into useable strategies and getting those strategies out to consumers).

Use of Constituency Input to Guide the Research Stages

A unique feature of this project was the development of the hypotheses through the application of Constituency Driven Research (Menz, 1995). In this applied social research model, stakeholders who would use the results of the research to make changes in either practice, programs, and/or policy are intimately involved in the entire research project from problem formulation to presentation stages of the Systematic Integrative Review. The staff utilized this Constituent Advisory Committee in the conduct of the project for:

1. Guiding project staff in selecting and refining hypotheses and related methodologies;

2. Identifying valuable resources including fugitive documents, key contacts, and consumer advocates to test the hypotheses;

3. Reviewing the validity and progress of the project synthesis process; and

4. Guiding the staff in designing communication products tailored for the project's intended audiences.

Although each stage must be successfully completed, the first stage of problem formulation was extremely critical. It is in this stage that the partnership is successfully established by agreeing on the problems that are to be studied and plan the direction of the research. In the data collection, data evaluation, and data analysis and interpretation stages, the researchers play the prominent role with the committee, ensuring the relevancy of the processes. The committee again then plays the more prominent role in the public presentation stage of the research.

Committee Composition and Selection

The composition of the Constituent Advisory Committee supplemented staff perspectives and knowledge in the areas of diversity, disability, family, school, and special education issues. The committee included potential consumers of the research who are teachers and family members with minority youth with serious emotional disabilities, individuals with disabilities, parents and family members who are from minority backgrounds, special educators, rehabilitation practitioners, researchers, and policymakers. The prime concern in recruiting members of this committee was to ensure that the perspectives of family members and practitioners (teachers) drive the project efforts.

The initial effort of the project was to finalize the composition of the committee. It was the intent to develop a committee that had competent representation of (a) minorities, especially Afro-Americans; (b) families of youth with serious emotional disturbances; (c) teachers of youth with serious emotional disturbances; (d) mental health providers; (e) related professionals; and (f) researchers. These representatives had to be adequately connected to the field and current in their efforts.

The membership of the committee consisted of 14 individuals who are listed in Table 2-1. Of the 14 members, five were teachers or other professionals in the school system, six were parents and/or had family members with serious emotional disturbances, and three were professionals active in the mental health field. Eight of the 14 members were from non-white backgrounds: six had Afro-American heritage, one had Hispanic heritage, and one member had American Indian heritage. Nine of the 14 were females, and only 4 of the 14 were based at universities or research institutes. The selection process was considered highly successful in meeting the intent of the project.

The first meeting of the committee was held on February 10 and 11, 1995, in Minneapolis, Minnesota. The second meeting was held on December 9 and 10, 1995, and the final meeting was conducted on June 29 and 30, 1996. The first meeting dealt with developing the conceptual framework for the Problem Formulation Stage of the project. On the second meeting, the success of the search and data collection strategies (Stages 2 and 3) were evaluated, while the final meeting focused on the interpretation and presentation techniques (Stages 4 and 5). The development of the problem statement is traced in the following section.

Problem Formulation and Development of Hypotheses

The problem formulation involved narrowing the scope of the multifaceted problem to specific problems to be addressed in this study. The first narrowing began in March of 1994 when the Research and Training Center developed a proposal to examine the literature with regard to minority youth with serious emotional disturbances and the effectiveness of public schools to educate these youth. The data from this project would be communicated to affected teachers and parents. The constituent-driven research process began in January of 1995 and was used to guide the project to its conclusion on December 31, 1996.

Problem Areas Identified by Constituents

A total of 41 different questions was generated about how techniques, programs, practices, and policies might affect minority youth with serious emotional disturbances. These questions were then consolidated under seven different topical areas. The concerns of these questions and the seven areas are contained in Appendix A. The next step was to develop the criteria for judging the effectiveness of the programs or techniques in relationship to the identified problem areas. For the purposes of this project, the criteria by which to judge their effectiveness were through various indicators of success while in school (e.g., attendance, grade point average, behaviors, and graduating with diploma) and success after exiting school (e.g., employment, post-secondary education, and positive social engagement).

Moderator Variables as Hypotheses. The Constituent Advisory Committee was also interested in a wide range of potential factors that might have an indirect effect on the effectiveness of programs for youth with serious

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emotional disturbances. The committee argued that no matter how effective a program might seem in theory under ideal textbook conditions, there are prerequisite conditions under teacher control that must guide program implementation. And, there are other factors within the school and community that can enhance or destroy program effectiveness.

There were three themes that appeared to be important for teachers to address when implementing programs: (a) cultural/racial biases, (b) family involvement, and (c) community-linked services. While these three areas were not primary factors, they did appear to represent three potentially useful concepts that function as moderator variables and affect the effectiveness of the primary processes. The committee indicated that the questions that teachers and families wanted answered were to what extent are:

1. Culturally and linguistically competent programs utilized and what is their impact on outcomes,

2. Families/guardians involved in these programs and what is their impact on outcomes,

3. Educational programs and related school services linked to community resources and what is the impact of these linkages on outcomes.

A different set of concerns focused on the context within which these programs were delivered and their impact on outcomes. The two contextual areas of concern were those aspects that occurred within the school (e.g., school wide policies on discipline, teacher support, teacher competencies, fiscal resources, and others) and those that concerned community demographics (e.g, racial and ethnic make-up of the community, economic base, socioeconomic profile of community members, population density, and others).

The Need for an Explanatory Framework

The complexity of program implementation with the potential for different factors to influence outcomes indicated that there would not be an easy answerer to the basic question of what works and what does not because it appears to depend on so many different aspects. Based on these concerns, there was a need to develop an explanatory framework so that all the concerns could be addressed in an organized approach. Figure 1 and its explanation in Chapter 1 is that explanatory framework and was the final product of the problem formulation stage. This framework guided all other stages of the research project.

Data Collection and the Search Strategy

Sources of Research and Literature

The initial search strategy was to locate data points through computer searches of on-line databases. This initial search strategy used several databases to search for different types of documents such as:

1. Research Reports. These included published reports in journals, books, and monographs from special education, rehabilitation, corrections, and social service areas. Unpublished, "fugitive," and interim reports were also retrieved from governmental archives (e.g., state education and legislative offices). The intent was to acquire the mass of outcome, benefit, process, and evaluative data with which to determine what the numbers say with respect to the hypotheses.

2. Model Programs. Published and unpublished articles, thought pieces, and training

documents for practitioners and parents were reviewed. These included parent-developed and professionally-developed how-to pamphlets, guidelines, and recommended approaches to working with serious emotional disturbances.

3. Census Data, Government Reports, and Public Policy Organizations. These resources allowed access to current data that are being used to evaluate the effectiveness of school programs for youth with serious emotion disturbances.

4. Educational and Clinical Pedagogy. Texts and representative curricula and syllabi used in the training and preparation of mainstream and special education teachers and of social service and rehabilitation practitioners provided leads on the logic, insular perceptions, and practices that may affect teacher-family collaboration. Taxonomic classifications of children and youth were sources for better understanding how these youth were included or excluded from educational-community connections.

5. Outcome and Impact Studies of students in and out of special education and of alternative programs for working with youth and youth-as-adults with mental illness. In addition to the national longitudinal studies, special education, corrections, mental health, employment and training, and rehabilitation literature were reviewed for this purpose.

6. Prominent Scholars' Writings and Key Review Articles in areas specific to the outcome for students with serious emotional disturbances were obtained.

7. Libraries and Clearinghouses containing articles on minorities, families, community-linked services, transition from school to work, and statistical studies were electronically searched.

In addition to these searches, additional techniques were used to ensure that critical articles were located. These techniques included:

8. Browsing References: Articles were reviewed and the references browsed for additional articles to one of the key terms.

9. Forward Citation Search: Key articles used to locate additional articles that cited these key articles. This strategy overcame some of the weaknesses of subject and key word index searches.

10. Advertising and Networking: A network was established with various professional organizations to advertise the project goals, and a document nominations form was sent to prominent authors in the field, members of the Constituent Advisory Committee, and other individuals in the network.

Building a Master Key Word Index

The search strategy relied upon the Master Key Word Index that was used for searching subject indexes, databases with their own controlled-vocabulary, those that allowed free text searches, and manual searches.

The Master Key Word Index for this study is presented in Table 2-2. The total sample for the search strategy was all documents published after 1980 relating to youth with serious emotional disturbances (SED) that reported on in-school measures and post-school measures.

In-School Measures

1. Measures of school participation (attendance, course failures, grade point averages, etc).

Table 2-2. List of Key Words Used in Coding Documents

Academic Performance
Adolescents
Afro-Americans
Antisocial Behavior
Arrest: In-School
Arrest: Post-School
Assessment
Attendance
At Risk
Attitudes
Behavior Disorders
Behavior Change
Behavior Enhancement Techniques
Behavior Reduction Techniques
Children
Client Satisfaction
Climate Variable
Cognitive-Emotional Techniques
Community Linked
Continuum of Care
Conduct Disorder
Conduct Problems
Corrections
Cost Effectiveness
Cultural
Definitions
Delinquency
Dropouts
Early Intervention
Educational Placement
Educational Strategies
Elementary Education
Secondary Education
Emotional Disturbances
Emotionally Disturbed
Employment
Ethnicity
Ethnic
Family
Foster Care
General Education
Grade Point Average or GPA
Graduation
Graduates
Federal Legislation
High Schools
Hispanics
Incarceration
Inclusion
Individualized Care
Independent Living
Individual with Disabilities Education Act (IDEA)
Inservice Education
Integration
Interpersonal Skills
Interventions (School-Based)
Juvenile Systems
Least Restrictive Environment or LRE
Mainstreaming
Mental Health - Mental Health System
Meta-Analysis
Moderator Variable
Minority
Normalization
Outcomes
Parents
Peer Tutoring
Placement
Post-School Success
Post-Sec Education
Prevalence Rates
Program Effectiveness
Program Implementation
Race
Residential
School Participation
Serious Emotional Disturbance
Services
Social Behavior or Interactions
Social-Cognitive Techniques
Social Disorder
Social Integration
Social Adjustment
Social Maladjustment
Socioeconomic Status
Transition
Transition Programs
Teaching Methods
Teaching Strategies
Training
Vocational Education
Wrap Around Services

2. Movement of youth with SED from SED Programs to mainstreamed regular education or movement from restrictive environments to less restrictive environments.

3. Social participation measures while in school.

4. The exiting modes of youth with serious emotional disturbances from secondary schools.

5. Community participation (e.g., arrest rate and incarceration rates) during school enrollment eligibility.

Post-School Measures

6. Rate of employment for any time period after exiting from secondary schools.

7. Rate of attendance in post-secondary education for any time period after exiting secondary school.

8. Positive measure of post-school community participation.

9. Rate of arrest for any time period after exiting secondary schools.

This search strategy was then followed by coding of the data. In the initial search strategy, approximately 100 documents were located and coded, while the revised search strategy discussed later raised that total to over 500 document citations with about half of these coded.

The Master Key Word Index also was used to search the project's database in order to retrieve sets of documents related to any one area or combination of areas based on the codes in the index.

Data Evaluation: Coding the Data

The coding forms were developed, piloted, and revised during the first six months of the project. The final forms were DBASE programs that enabled data coding, storage and retrieval of information, and data analysis and are contained in Appendix B. This appendix is the coding handbook developed to specify exactly how various information will be coded and entered into the computer.

Master Form (Study File)

This file contained the basic information on each article for recording the text-based contents for searching and retrieving information. The citation, abstract, general key words, relevance to the hypothesis of the study, discussion points, and conclusions are all included so that text and data can be tied together. This panel basically represents the note taking that would have been stored on 3 x 5 cards for a traditional literature review.

The direct relevance of the study to the hypotheses is also recorded on this form. This part is very basic yet it allows the coding of the documents addressing the (a) Identification and Assessment, (b) Classification and Placement, and (c) Educational Strategies that are used for youth with serious emotional disturbances. It also allows coding for the presence of process moderator variables (family, race, and community linkages) and climate moderator variables (school-wide strategies and community demographics).

If there were no data within the document, then only a Master Form was completed. Data-based articles had the necessary number of Demographic and Size of Effect Forms completed as required for each variable or hypothesis. Though only one Master Form was completed per study, a study may have had one or more of these later two forms coded depending on the content of the study.

Demographics Form (Statistics File)

Studies that contained data on the process had a Demographics Form completed in order to report the basic descriptive information about the youth with serious emotional disturbances involved in the study. If multiple analyses were reported with different demographics, additional demographics forms were completed and each had its own unique sequence number.

Size of Effect Form (Statistics File)

This form was designed to code the data for a statistical meta-analysis of the data across all databased articles. It allowed for coding of data for a 2 x 2 chi-square or other 2 x 2 non-parametric tests in the first panel. The second panel is set up for t-test and F-tests. The summary of size of effect is given in the third panel, which is flexible for including correlations. Finally, the last section allowed the recording of the d-index, r-index, and other transformations. Also a memo note section was available so that any comments or additional information could be included. Each Demographics Form had at least one accompanying Size of Effect Form. Additional Size of Effect Forms were completed for each analysis for any given set of demographics. The sequence number for the size of effect was tied to the specific sequence number for the appropriate demographics characteristics.

Data Analyses and Interpretation: Testing the Hypothesis

The evaluation of data points was expected to primarily rely on synthesis techniques related to quantitative and qualitative literature: (a) meta-analytic techniques and (b) consensus building of narrative literature review (multivocal records). As part of the conditions specified by the grant, the principal investigator attended training on research syntheses (Cooper & Hedges, 1994) conducted by Harris Cooper. Also, a revised methodology was evaluated by Harris Cooper and the Project Officer in Project Month 5 (May of 1995). The feedback from this evaluation suggested further test coding of the data and revising of the forms until they represented the conceptual problem of the study, exact information on the method of the study, and specific procedure for combining effect sizes across the studies. The project then moved much more toward a quantitative approach by relying on statistical data for calculating effect sizes and ensuring that the meta-analysis could be replicated. The revising of the forms was completed by Project Month 7 and data coding began with these revised forms, which are those described above.

Though the Master Form provided information about the content of the study, it was the Demographic Form and Size of Effect Form that became the focus to accomplish the major objective of a quantitative data analysis. The preliminary data analysis, however, was presenting a different picture of the feasibility of this approach. Even as early as Project Month 7 during which time the project staff met with the project officer at the annual project directors' meeting, it appeared that data were lacking to develop significant measures for size of effect. Thus, there was concern that quality of the research and the number of studies were simply not consistent with a meaningful meta-analysis.

Even though this problem appeared to be valid, the search and coding strategy had just begun with the approved forms and therefore it was too early to be certain that all potential documents had been located. The decision was made to continue with the approved methodology and bring the results to the Constituent Advisory Committee. The search and document coding continued from Month 7 to Month 11, and the preliminary data analysis was prepared in Month 12 for presentation to the Constituent Advisory Committee.

Constituent Advisory Committee Evaluation of Methodology and Progress

The second Constituent Advisory Committee meeting was held in January of 1996. It was at this meeting that the success of the search strategy, the data coding and evaluation, and the initial data interpretation were reviewed. The meeting focused on the failure of the design with regard to the relevancy of the current documents and to locating a sufficient number of data based documents.

Relevancy: Hazards of Electronic Searches. The advances in storage and retrieval of data were expected to enable a thorough search of most of the published data relating to the framework developed in Chapter 1. About 100 articles had been coded at this time, and the committee reviewed the progress to date. The electronic search had failed to retrieve some key articles for several reasons. First, the titles and abstracts did not necessarily contain the key words relating to the outcome measures of the project's framework even if that document did indeed have data on the variable in question. Secondly, several key documents of question by the committee had been excluded since they lacked original data. Lastly, it appeared that there were restrictions on the scope of documents included since the databases would periodically have documents removed and added, thereby resulting in different outcomes for a search. From the project's staff perspective, it appeared that reviewing the reference sections of key articles was a more efficient and direct method for obtaining a more comprehensive set of documents. Electronic searches appeared only to assist in locating the initial set of references. It was then necessary to shift to manual searches through the bibliographies of relevant documents that may or may not have data.

Quality and Quantity for Effect Sizes or "Where's the DATA?" Data on the key areas of the framework were not in great abundance. And when data were found on the same area, the differences in methodological approaches among the documents was so great that it was not logical to combine them in order to obtain a more accurate size of effect. While the framework in Chapter 1 proved to be a valuable and reasonable explanatory process for searching and organizing the data, it also highlighted the difficulties in the search for effect sizes. First, it offered alternative explanations for the data results and magnified the errors in the data for the lack of control over many variables and errors in the design regarding the confounding of data. Most of the data points (documents) lacked acceptable quality in the methodology and were weak in their explanatory capacity. Therefore, it was not reasonable to combine data points for size of effect. In the end, almost all of the data were descriptive on different samples of youth with serious emotional disturbances. Other data indicated that those differences (such as different states or national versus state) were so great so as to preclude combining data points.

Revising the Search Strategy and Data Evaluation Stages

Based on the lack of success with the electronic search and quantitative approach to synthesis, the search strategy and subsequent data evaluation were revised. The primary search strategy relied on reviewing the description of references and their citation for potential application. Secondly, citation data were entered into the data for all potential relevant articles. This expanded citation index developed for the database was then reviewed for selecting articles for retrieving. The abstracts of retrieved articles were entered, application to outcome areas coded, and type of document coded. While this strategy did not significantly increase the number of data based articles, it significantly increased the number of articles relevant to the explanatory framework.

The database increased from 100 to nearly 500 citations. Of these 500 about half were coded. It was these articles that resulted in developing more of the questions about the problem areas in the study.

Based on the lack of combinable data points and availability of different effect size estimates, the statistical meta-analysis of the documents was abandoned. In its place, the analysis presented a summary of data values grouped by the outcome measures and by racial breakdown. In addition, it was clear that the explanatory process of Figure 1 presented a high benchmark of conceptual thinking and research design that few documents passed. The criteria, however, were not unreasonable. It was recognized that the field is relatively new (about 20 years since P.L. 94-142) and that much of the higher quality designs dealt with the effects of certain techniques on specific target behaviors (for example, level systems on classroom behaviors) and that much less research interest was evident on measuring the impact of these programs on more global and perhaps more relevant areas such as school performance and participation, community life, and post-school success.

Documents in the Database

Approximately 500 citations were entered into the bibliography for potential retrieval and coding in the database. Further screening reduced that to approximately 250 articles, reports, and books. Table 2-3 summarizes various characteristics of the documents in the database. Most of the documents are relatively recent with about 200 or about 80 percent within the last eight years (1989-1996). About 81 percent were either books (26%) or articles (55%). Approximately 58 percent were narrative with no descriptive data, 27 percent contained descriptive data of some type, and about 15 percent attempted some type of comparative analysis using inferential statistics. Race or minority was discussed in about a third of the documents, and processes were discussed in a little over 40 percent. In all, one or more outcomes were mentioned about 300 times in the 258 documents. Of these 300 instances in which information was given about outcomes (not necessarily data), most discussed or presented data on in-school outcomes (71%), and the remaining 29 percent examined various aspects of post-school success.

Presentation Stage

The last stage was the presentation stage that was the design for communicating the data in various formats to the primary two audiences: parents and teachers. The design of this stage was limited by the scope of the project as defined under the grant and by the constraints of the funding agency. The original design called for the development of the presentation of data in formats for teachers and parents in a conference(s) scheduled around the 21st month of the project (or about October, 1996) and conducted by the Innovation and Development Division of the Office of Special Education Programs. It was expected to package the material for that conference to their specifications, receive feedback from the audiences, and revise materials as necessary. The grant did not require the Center to conduct any extensive dissemination of the materials, and the project officer would make the final decisions about dissemination.

Based on the communication with the project officer about the likely outcomes of the project, the decision was made by the grantee for the development of a report that would be peer reviewed by three individuals (two selected by the grantee and one nominated from the Constituent Advisory Committee for this project). The decision was to prepare a final report on the project to complete the research phase of the grant, revise the final report based on peer review, and participate as much as possible under the terms of the grant in any communication plans proposed by the grantee.

The final meeting of the Constituent Advisory Committee was conducted in June of 1996 during which they reviewed the draft of this report and the bibliography referencing the approximately 500 documents. The committee approved of the presentation format of the data and concurred with most discussion of the data. Each committee member recommended an article or other sources to check with about different data elements. Though the committee's expertise was always valuable in conducting the study, their contribution to the problem formulation stage and this stage was critical. Only a summary of the data and their relevancy was presented to the committee, and the tasks at this meeting were to draft the conclusions and suggest ways to present the data. Their input and recommendations are included in the remaining sections of this report.

Table 2-3. Summary of the Documents in the Database

		Within Category		Total Documents	
Areas	Categories	#	%	#	%
All Documents	Bibliography			494	100.0
	Selected for Coding			258	52.2
Year				258	100.0
	1995-1996-In Press	51	19.8		
	1992-1994	88	34.1		
	1989-1991	62	24.0		
	1985-1988	40	15.5		
	1981-1984	9	3.5		
	1980 or earlier	8	3.1		
Type of Study				258	100.0
a	Book/book chapter	67	26.4		
b	Journal article	141	54.7		
c	Technical report	3	1.2		
d	ERIC document	2	0.8		
e	Project report	6	2.3		
f	Conference presentation	12	4.7		
g	Unpublished manuscript	2	0.8		
h	Newsletter	2	0.8		
i	Government report/census study	17	6.6		
j	Other	6	2.3		

(Continued on next page)

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Table 2-3 Continued. Summary of the Documents in the Database

Areas	Categories		Within Category		Total Documents	
			#	%	#	%
Research Method					258	100.0
	a=Narrative - no original data		151	58.5		
	1. Position paper or advocacy	(42)				
	2. Literature Review	(60)				
	3. Program/Project Description	(19)				
	4. Review of Program/Project	(8)				
	5. Policy Analysis	(16)				
	6. Other	(6)				
	b=Descriptive summary report		69	27.1		
	1. Rates or National Statistics	(23)				
	2. Program Descriptive Data	(24)				
	3. Descriptive Research Data	(22)				
	c = Comparison		38	14.7		
	t T-test or similar	(19)				
	c Chi-square or similar	(8)				
	r Correlation	(6)				
	M Multivariate Analyses	(1)				
	x Other	(4)				
Race or Minority			85	32.9	258	100.0
Process			109	42.2	258	100.0
Outcomes			159	61.6	258	100.0
	In-School				213*	71.0
	A. Placement		43	14.3		
	B. Performance		20	6.7		
	C. Graduate		25	8.3		
	D. Dropout		41	13.6		
	E. Arrest		6	2.0		
	F. Other		78	26.0		
	Post-School				87*	29.0
	A. Employment		27	9.0		
	B. Education		23	7.6		
	C. Arrest		4	1.3		
	D. Community Living		17	5.7		
	E. General Success		11	3.7		
	F. Other		5	1.7		

* Documents would typically address more than one of the outcomes. Not all of these documents contained data on the outcome variable.

Chapter 3

Prevalence and Minority Representation

In this chapter, the data on estimates of the prevalence of youth with mental health problems and the actual number of youth in school programs for the seriously emotionally disturbed are reviewed. In the other sections of this chapter, data on the rates of representation of youth from various minority ethnic groups are reviewed.

Prevalence of Emotional Problems in Children

Youth who are in need of mental health services are defined in different ways by the mental health organizations and the schools. The incidence or prevalence of psychiatric disorders in children are defined by the DSM-IV diagnostic manuals for mental health organizations. For schools, the population of youth with serious emotional disturbances is defined by federal and state legislation for the provision of special education. The number of students with serious emotional disturbances are counted annually by the Office of Special Education Programs as part of the reporting procedures for the implementation of the Individual with Disabilities Education Act (P.L. 94-142). The estimates of the prevalence of emotional problems vary widely between these two systems.

Table 3-1 summarizes the data from studies on prevalence of psychiatric disorders in youth and adolescents and prevalence of serious emotional disturbance in the school system. Table 3-1 and the remaining tables in this section all have a similar format. The area being measured is given first followed by the year(s), then the study and description of the design and sample are given. The data are presented for the total sample in the study and then given for different sub-samples of the total sample when available (typical ethnic sub-samples).

Estimates of Prevalence Rates for Psychiatric or Mental Health Problems

The prevalence of psychiatric disorders in children under the age of 21 may be anywhere from 6-20 percent (Brandenburg, Friedman, & Silver, 1990; Coiro, Zill, & Bloom, 1994; Ing & Tewey, 1994; Knitzer, Steinberg, & Fleisch, 1990b). Brandenburg et al.(1990) reviewed eight prevalence surveys of children ranging in age from 4 to 16 (not all studies included the same range) in five Western developed nations and concluded that the majority of overall prevalence rates for moderate to severe disorders ranged from 14-20 percent. Zill and Schoenborn (1990) reported the data from the 1988 National Health Interview conducted in the United States. They found a prevalence rate of 13.4 percent for children ages 3-17 years old having an emotional or behavioral problem lasting three months or more or that required psychological treatment. The 1991-92 Survey of Income and Program Participation (SIPP) indicates that 6.2 percent of the children (ages 0-17) in the United States have a mental or emotional problem or disorder that is the first, second, or third condition causing a disability (Ing & Tewey, 1994). Knitzer et al. (1990b) cite sources, one of which is Brandenburg et al. (1990), where they estimate the rate to be between 8 to 12 percent.

On the other hand, a technical work group for the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration (Friedman, Katz-Leavy, Manderscheid, & Sondheimer, 1996) reviewed

Table 3-1. Estimates of the Prevalence of Emotional Problems in School-Age Youth Versus Percent of Total School Enrollment in Special Education Programs for Serious Emotional Disturbances

Types of Rates	Year of Data	Study	Design and Sample	Findings in Percent (%) of Total Population
Percent of emotional problems occurring in 0 to 17 age group as reported in various national surveys or other research or reviews	1996	Manderscheid and Sonnenschein, (Eds.), Center for Mental Health Services, 1996	Recommendations about range of prevalence rates based on review of existing studies	Serious: 9-13 Severe: 5-9
	1991-1992	Ing & Tewey, 1994	Survey of Income and Program Participation, Table 7, page 49	6.3
	1992	Wenger, Kaye, and LaPlante, 1996	1992 National Health Interview Survey of Child Health, Table 4, page 4.	8.5
	1990 *	Zill and Schoenborn, 1990	1990 National Health Interview Survey of Child Health, 1990. Ing & Tewey, 1994. Table 13, page 61.	13.4
	Prior to 1986	Knitzer, Steinberg, and Fleisch, 1990a	Review of other studies on prevalence	8-12
	Prior to 1986	Office of Technology Assessment, 1986	Review of other studies on prevalence	11.8
	Prior to 1986	Bradenburg, Friedman, and Sliver, 1990	Review of other studies on prevalence	14-20
Percent of youth with serious emotional disturbances of all youth enrolled in school	1993-1994	U.S. Department of Education, 1995 (17th Annual Report)	Calculated from SED Age 6-21 Counts from Table AA4, p. 4 divided by Age 6-21 Counts for (1993-94 from Table AF1-1993-94 Table AF2)	0.7
	1977-1993	Oswald and Coutinho, 1995	Analyses of state data to OSEP 1976-77 to 1992-93.	About 0.9

* This study included ethnic prevalence: 14.2 for white ethnic groups, 10.5 for African American groups, and 12.0 for Hispanic ethnic groups.

seven studies that measured impairment on a specific instrument and concluded that

> Since there is no one study of national scope from which to derive a single estimate of prevalence, and since there is insufficient data to assess how or if prevalence rates vary for different age groups, racial and ethnic groups, genders, socioeconomic status, the Work Group recommends that prevalence be estimated with a range for both levels of impairment distinguished between "serious" and "severe."
>
> The recommended range is 9% to 13%, for the less conservative range [i.e., serious], and 5% to 9% for the more conservative range [i.e., severe]. (p. 80)

This group conceptualized the less conservative range as including all who had a serious and severe emotional problem and the more conservative range as representing those who only had a severe emotional problem.

Only Zill and Schoenborn (1990) provide information about racial groups and this information is limited to whites, African Americans, and Hispanics. The data from the National Health Interview indicate that the rate of incidence of emotional problems is higher for whites than African American (14.2% versus 10.5%). Other data indicate that the rate for Hispanic is 12.0 percent versus 13.6 percent for non-Hispanic.

It is important to note that estimates of mental health problems suffer from a number of methodological problems. Perhaps, the most important is the lack of definition of what a problem is. For example, the National Health Interview requires that the problem lasted three months or required treatment. Such a definition would tend to exclude members of lower socioeconomic classes who do not have access to treatment or ethnic groups that do not wish to reveal such problems to others. The other problems in defining emotional problems are in terms of severity and type of condition. Currently, Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration is working on the development of a standardized definition of mental health problems for more accurately measuring prevalence (Manderschied & Sonnenschein, 1996). For now the estimates by Friedman et al., 1996, of 5-9 percent for severe mental health problems and 9-13 percent for less severe problems would appear to be the most reliable based on their review.

Number of Youth in School Programs for Serious Emotional Disturbances

The number of students ages 6-17 identified with serious emotional disturbances is given in the annual reports to Congress based on state annual child count data submitted on December 1 of each year. The latest report (Seventeenth Annual Report) indicates that 414,279 students are classified as having a serious emotional disturbance and represent about 9 percent of the 4,786,065 students with a disability in the 1993-94 school year (U.S. Department of Education, 1995). This figure represents approximately 0.7 percent of the total school enrollment in 1993-94 of youth age 6-21 (57,563,348) and has remained relatively constant at less than one percent since the national count data were first collected (Oswald & Coutinho, 1995).

The variability among states regarding the incidence rates of students with serious emotional disturbances is extremely high. In the 1992-93 school year (U.S. Department of Education, Sixteenth Annual Report to Congress, 1994), for example, the incidence rate varied from 0.4 percent in Mississippi to a high of 2.08 percent in Connecticut. In shear numbers, there were less than 300 students identified in smaller states (e.g., Mississippi and Arkansas) to 25,000 - 45,000 students in larger states such as Florida, Illinois, New York, and Texas. Yet, size alone does not account for the variation in the number of youth identified with serious emotional disturbances with California (about 12,000) not differing substantially from those identified in Connecticut (about 11,000), Minnesota (about 12,000), or Wisconsin (about 11,000).

Age of Onset for School Serious Emotional Disturbances

Two studies are summarized in Table 3-2 that provide information about the age of onset of emotional problems in relation to other disabilities. Wagner et al. (1991) reports that the age of onset for serious emotional disturbances as reported by the parent is less likely during the first year than other disabilities (8.9% versus 16.5%) and more likely than other disabilities during the ages of 13 or older (16.2% versus 8.0%). The Sixteenth Annual Report to Congress on Individuals with Disabilities Education Act (U.S. Department of Education, 1994b) has similar data with a lower rate during the ages of 6-11 for youth with serious emotional disturbances than all disabilities (35.0% versus 52.0%) and a greater rate during the ages of 12-17 (60.0% versus 43.0%). Both reports indicate that the likelihood of emotional disturbances increases with age of the individual.

Gender Differences for School Serious Emotional Disturbances

Representation of males and females among youth for serious emotional disturbances is clearly not equal as is evident from Table 3-3. The approximate breakdown in the general student population is 51.2 percent males (Ing & Tewey, 1991), while 68.5 percent of all youth with disabilities in special education are males. Data from the National Longitudinal Transition Study and the Office of Civil Rights found that between 76.4-80 percent of the youth with serious emotional disturbances were males.

Table 3-2. Age of Onset of Emotional Problem or Serious Emotional Disturbances

Types of Rates	Year	Study	Design and Sample	Findings in Percent (%) of Total				
				>1	1-4	5-8	9-12	13 +
All disabilities	1986	National Longitudinal Transition Study	Parent/School/Survey: Parental report of onset. Table 2-9 on page 2-16.	16.5	10.4	42.7	22.4	8.0
Serious emotional disturbances	1986	National Longitudinal Transition Study	Parent/School/Survey: Parental report of onset Table 2-9 on page 2-16.	8.9	11.3	41.4	22.1	16.2
				--	--	**6-11**	**12-17**	**18-21**
All disabilities	1994	16th Annual Report to Congress	Chapter 1 and SOP during 1992-93. Figure 4.1 page 112			52	43	5.0
Serious emotional disturbances	1994	16th Annual Report to Congress	Chapter 1 and SOP during 1992-93. Figure 4.1 page 112			35	60	5.0

Table 3-3. Gender Representation Among General, Special Education, and Serious Emotional Disturbances Populations

Types of Rates	Year of Data	Study	Design and Sample	Findings in Percent (%) of Total	
				Male	Female
General student population	1991	Ing & Tewey, 1994, Table 17, page 69	1991 National Health Interview Survey as reported by Adams & Benson 1992	51.2	48.8
Special education population	1985-86	Wagner et al., 1991	National Longitudinal Transition Study: Parent/School/Survey	68.5	31.5
Youth with serious emotional disturbances	1990	OCR - as cited in Ing & Tewey, 1994, Table 37, page 115	1990 Elementary and Secondary School Civil Rights Survey, Office of Civil Rights in DOE	80	20
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study: Parent/School/Survey	76.4	23.6

School Serious Emotional Disturbance Versus Other Disabilities

In relation to other categories of special education, the rate of identifying youth with serious emotional disturbances has been relatively stable at about 8-9 percent of all youth with disabilities (U.S. Department of Education, 1994). It is the fourth most prevalent disability behind specific learning disabilities (51.4%), speech and language (21.6%), and mental retardation (11.5%). The National Longitudinal Transition Study (Wagner et al., 1991) found a slightly higher rate of serious emotional disturbances of 10.5 percent of that sample of all youth in special education programs. These data are summarized in Table 3-4.

Mental Health Problems Versus Special Education Programs for Youth With Serious Emotional Disturbances

The data from mental health prevalence studies indicate that the prevalence rate of 5-13 percent for psychiatric disorders in children is much higher than the public schools' national average of less than one percent placement rate of youth in special education programs for serious emotional disturbances. These rates are based on different criteria that would make direct comparison inappropriate. For example, psychiatric disorders are estimated based on reports of need rather than the actual number receiving psychiatric services. Nor is it clear how long lasting these reported emotional or behavioral problems may be. For the schools, the figures are the actual number of students with serious emotional disturbances being served by schools in special education.

In addition, the presence of a disorder in and of itself is only one of the two criteria for schools since there must also be a deficiency in academic areas. Consequently, as Knitzer et al. (1990b) indicate, not all children who have psychiatric disorders need special education due to their condition.

Table 3-4. Prevalence of Serious Emotional Disturbances in Comparison to Other Special Education Categories

Types of Rates	Year	Study	Design and Sample	Categories* as a Percent (%) of Total				
				LD	S/L	MR	SED	Other
Percent of disabilities in special education categories	1992-1993	17th Annual Report to Congress, 1996	Chapter 1 and SOP during 1992-93. Table AA4, page A-4 (calculated from data)	51.0	21.9	11.2	8.7	7.2
	1991-1992	16th Annual Report to Congress, 1995	Chapter 1 and SOP during 1991-92. Table 1.4 on page 9.	51.1	21.6	11.5	8.7	7.1
	1986	National Longitudinal Transition Study, 1991	Parent/School/Survey: Parental report of onset Table 2-2 on page 2-4.	55.7	3.4	23.9	10.5	6.5

* LD	Learning Disabled
S/L	Speech and Language
MR	Mental Retardation
SED	Serious Emotional Disturbances
Other:	Multiple disabilities, hearing impairment, orthopedic impairments, other health impairments, visual impairments, autism, deaf/blindness, and/or traumatic brain injury

There has been confusion about whether the difference between these rates represents an unmet need for mental health services in the school. While the rates differ, it should be clear that the rates are from two different systems and should not be interpreted as measuring the same need.

Many of the emotional problems require the need of individual counseling in a therapeutic relationship, which is not the main focus of a special education program for youth with serious emotional disturbances. The focus there is to minimize problems so that learning can continue. While these youth with emotional problems may require therapy, it is not also true that they require placement in special education.

Minorities and Rates of Representation

Rate of representation refers to the comparison of the relative rate at which a minority group is represented in the special education categories in comparison to the relative rate of representation in the general population. The concern for the rate of representation of minorities in special education began with Dunn in 1968 whose "best judgment" was that 60-80 percent of the students in programs for mental retardation came from "low status" backgrounds (e.g., Latino; African American; native American groups; and from broken, disorganized, and inadequate homes). That is, minorities and other groups might be represented in special education categories greater than their rate of representation in the general population. The relative rates of various minority groups in the general population and the prevalence rates for various youth with serious emotional disturbances is given in Table 3-5.

In the general population, the 1990 Census by the Department of Congress indicates that white ethnic groups make up about 76.3 percent of the population while African American ethnic groups make up 11.5 percent; Hispanic ethnic groups are next at 8.6 percent. Asian and Pacific Islander ethnic groups make up about 3 percent of the population and Native Americans including both Indian tribes and Eskimos are less than 1 percent of the population.

In a recent report by Walker, Asbury, Rodriguez, & Saravanbhaven (1995), ethnic make-up of vocational rehabilitation clients was calculated from the R-300 case reports. For this population, African American ethnic groups made up a greater percentage of the cases (17.5%) than their representation in the general population (11.5). While Asian and Pacific Islanders were represented less in the vocational rehabilitation population when compared to their rates in the general population, the representation rates for other ethnic groups were nearly the same as that within the general population.

Three sources have been cited on the relative representation in the general student population: Office of Civil Rights in terms of the enrollment in schools, Center for Educational Statistics for youth in high school and beyond, and the Department of Labor's National Longitudinal Survey of Youth. About 70-73 percent of all youth were white, 12-16 percent of the youth were of African American backgrounds, and about 10-12 percent were Hispanic. Asian/Pacific Islander made up about 3.0 percent, and another 1.0 percent were Native American (Alaskan natives and American Indians).

The two studies that report on the ethnic proportion of youth in different disability categories are the National Longitudinal Transition Study and the Office of Civil Rights report of 1993. Wagner et al. (1991) reported that 65.0 percent of all students in special education were white, 24.2 percent African American, 8.1 percent Hispanic, 0.7 percent Asian/Pacific Islander, and 1.2 percent Native American.

Data are also available on the proportion of different ethnic groups having youth with serious emotional disturbances from the 1986 Office of Civil Rights. The total ethnic make-up of this population was 65 to 71 percent white ethnic/racial background, 22 to 27 percent were of African American ethnic/racial background, six to seven percent were of Hispanic backgrounds, and one percent or less were Asian/Pacific Islander or Native American (Wagner et al., 1991). These data suggest that proportional representation of youth from disproportionate African American ethnic groups is more in the total special education programs than in programs for youth with serious emotional disturbances. In comparison to the contrast group (High School and Beyond/NLSY for the National Longitudinal Transition Study), it would appear that the rate for African American students being in special education is approximately 8-12 percent higher than their rate of representation in the general population. For all other ethnic groups, the rates are approximately equal or lower than the rates in the general population.

For youth with serious emotional disturbances, again only African Americans are represented at a rate greater than their proportion in the general populations. Based on the mid-point between the National Longitudinal Transition Study and the Office of Civil Rights studies of 14 and 16 percent rates of representation, African American ethnic groups are estimated to make up about 15 percent of the total student population.

Table 3-5. Minority Representation Among General, Special Education, and Serious Emotional Disturbances Populations

Types of Rates	Year	Study	Design and Sample	Findings in Percent (%) of Total				
				White	African American	Hispanic	Asian/ Pacific Islander	Native American
General population	1990	Department of Commerce	Census of all households in US	76.3	11.5	8.6	2.8	0.8
Adult vocational rehabilitation population	1991	Walker et al., 1995	Analysis of data of cases (RSA 911 - Vocational Rehabilitation)	72.4	17.5	8.4	1.0	0.6
General student population	1990	OCR - Office of Civil Rights in DOE *	1990 Elementary and Secondary School Civil Rights survey, 1992 - calculated from data	67.9	16.2	11.5	3.4	1.0
	1987	High School & beyond (Center for Educational Statistics)**	Youth in HS and beyond survey	70	12.2	12.6	Other = 5.2	
	1986	OCR - Office of Civil Rights in Dept of Education ***	1986 Elementary and Secondary School Civil Rights survey, 1987	70	16	10	3	1
	1979-1983	National Longitudinal Survey of Youth (NLSY) Department of Labor**	Youth age 15-20 in Secondary School (note does not sum 100%)	73	14	6.2	Other = 6.9	

(Table continued on next page)

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Types of Rates	Year	Study	Design and Sample	Findings in Percent (%) of Total				
				White	African American	Hispanic	Asian/ Pacific Islander	Native American
Special education population	1990	OCR - Office of Civil Rights in DOE *	1990 Elementary and Secondary School Civil Rights survey, 1992 - calculated from data	68.3	19.3	10.0	1.1	1.3
	1987	National Longitudinal Transition Study **	Parent/School/Survey	65	24.2	8.1	0.7	1.2
Youth with serious emotional disturbances	1990	OCR - Office of Civil Rights in DOE ****	1990 Elementary and Secondary School Civil Rights survey, 1992	71	22	6	1	1
	1986	National Longitudinal Transition Study **	Parent/School/Survey	67.1	25.1	6	0.1	0.9
	1986	OCR - Office of Civil Rights in Dept Of Education ***	1986 Elementary and Secondary School Civil Rights survey, 1987	65	27	7	0	1

* See Tables 7-2 & 7-3 in 16th annual report

** See page 2-19 of Wagner et al., 1991, and page 55 of chartbook Table 10 (Ing & Tewey, 1994)

*** See Harry, 1992, page 62, Table 3-1,

***** page 4 of Council of Ex Children, 1994 , and Table 37 of Chartbook (Ing & Tewey, 1994)

In contrast, the mid-point percent for representation of African American ethnic groups in programs for youth with serious emotional disturbances is 23.5 (mid-point of 22 and 25%). The estimated rate of representation is about 8.5 percentage points greater than would be expected based on their rates within the general population. Based on the child count in the 17th Annual Report to Congress of about 400,000 youth with serious emotional disturbances nationally, approximately 34,000 more African American youth are in these programs than would have been expected if their rate of representation was equal to their rate in the general student population.

In contrast, according to a survey of parents within the general population (Coiro et al., 1994), a higher proportion of white children have one or more of the following conditions -- learning disabilities, developmental disabilities, emotional, or behavioral problems -- than do Asian or African American children. No differences were found for Hispanics and non-Hispanics. The authors, however, had expected that minorities would be at-risk for these disorders and cited several factors that may have accounted for this reverse finding (e.g., unfamiliar wording, lower literacy levels, and differential recall of past events as well as unwillingness to seek assistance or inaccessibility of care).

These data are based on national surveys or national data bases. The Office of Civil Rights (1992) also reported ethnic makeup by states. As expected, states like Hawaii had greater representation of Asian/Pacific Islanders (72%), Alaska more Native Americans (25%), and California and Arizona more Hispanics (27% and 26%). The most glaring differences, though, were in New Jersey and New York where African Americans made up 17 percent of the population, but African American youth was 30 percent of all youth in programs for serious emotional disturbances in New Jersey and 53 percent of all youth in programs for serious emotional disturbances in New York.

Based on the Office of Civil Rights surveys in 1986 and 1990, there appears to be a trend for the number of youth with white backgrounds to be decreasing in the general population (70% to about 68%), the number of African American youth staying steady at 16 percent, and an increase in the number of Hispanic youth. Such a trend is consistent with the predicted tripling of Hispanic speaking youth by the year 2020 with a declining proportion of white youth (sources reviewed by Utley, 1995). The other trend that may be occurring according to the Office of Civil Rights reports is a decrease in the proportion of African American youth in the serious emotional disturbances category from 27 percent in 1986 to 22 percent in 1990; however, there is no other source to confirm this potential trend.

Caution has to be observed in interpreting trends from the Office of Civil Rights data and other sources due to the methodology, particularly with regard to potential differences in sampling. The Office of Civil Rights samples only a small proportion of the school districts and these appear to change from year to year. Valid and reliable data are needed to determine if changes in programs are being reflected in different statistics.

What is not clear is why some minority groups are represented at a greater proportion within special education and within the category of serious emotional disturbances than their general population representation, while others are represented in these same areas at a proportion less than in the general population. Other studies have sought to examine relationships among the various incidence rates and demographic factors. Osher and Hanley (1995) state that their preliminary analysis of the 1990 and 1992 Office of Civil Rights data suggests that there is "some evidence of systematic over-representation in school with lower overall black enrollment and possible under-identification in districts with higher overall black enrollment" (p. 5). Finn (1982 as cited in Harry, 1992) found an opposite pattern with Hispanics and Native Americans having a higher prevalence rate in states that have greater enrollment of these two groups and lower prevalence rates in those that have lower enrollment. For African Americans, though, the numbers were always higher.

Oswald and Coutinho (1995) analyzed the state identification rates for youth with serious emotional disturbances from the Fifteenth Annual Report to Congress to determine factors that might explain the variability. Each state's racial/ethnic background as a whole was used as a race variable. Larger minority representation in a state was not associated with higher or lower identification rates of youth with serious emotional disturbances. It must be noted, however, that these authors used the percentage of "white" as the variable rather than the percentage of African Americans. If African Americans are overrepresented and Hispanics are underrepresented, the estimate of the proportion of minority background could be distorted by the off setting errors.

Summary

This chapter has reviewed some critical areas. First was the incidence of mental health problems with youth and the number of youth served in programs for youth with serious emotional disturbances. While the prevalence of mental health problems of youth in this age group is estimated to be 5-10% of the population, only about 1% of the youth in the same age group are in programs for youth with serious emotional disturbances. Despite the discrepancy, the two numbers are not measuring the same thing. One represents the existence of a mental health problem for various durations and the other represents an educational problem tied to behavioral disorders and/or severe mental illness.

The other major section dealt with the rates of representation of minority groups in programs for youth with serious emotional disturbances. The data were fairly clear that not all minority groups are represented at rates equal to their rates of representation in the general student population. Some minority populations are represented at a lower rate than their rates in the general student population and some at a rate higher than those in the general student population.

Chapter 4

The Processes

In this study, a conceptual model (see Figure 1) guided the review of the available literature to evaluate the relationship between processes for youth with serious emotional disturbances and the major in-school and post-school outcomes. This chapter presents an overview of the processes and techniques involved in special education programs for youth with serious emotional disturbances, counts of youth with serious emotional disturbances, and rates of representation for minority ethnic groups. Three major areas of practices and programs for youth with serious emotional disturbances are covered: (a) Assessment and Classification (how such youth are identified and assessed), (b) Placement (current educational placement options in special education), and (c) Classroom-Based Techniques (types of programs often used with youth with serious emotional disturbances).

Identification and Assessment

Identification refers to the process by which students may be considered as potentially having a serious emotional disturbance. Assessment refers to the process that is used to confirm whether the student does or does not have such a problem. With respect to the identification of a student as having a serious emotional disturbance, Gerry (1984) cites three conditions or criteria that must be met: (a) a determination must be made that the student has a condition described as serious emotional disturbance, (b) that the said condition has an aversive effect on education, and (c) that special education and related services are needed. The main task in identification and assessment is collecting valid information to determine whether a student has a serious emotional disturbance.

The identification of a student for referral to the assessment process is typically based on the judgment of the teacher that a student is having academic and behavioral problems that may be associated with a cluster of behaviors consistent with those listed in the definition of serious emotional disturbance. Wisconsin's definition provides specific examples of the types of behaviors that may be indicative of a serious emotional disturbance. Such a condition is

> . . .characterized by emotional, social, and behavioral functioning that significantly interferes with the child's total educational program and development including the acquisition or production, or both, of appropriate academic skills, social interactions, interpersonal relationships or intrapersonal adjustment. The condition denotes intraindividual and interindividual conflict or variant or deviant behavior or any combination thereof, exhibited in the social systems of school, home, and community and may be recognized by the child or significant others . . . The following behaviors, among others, may be indicative of emotional disturbance:
>
> a. An inability to develop or maintain satisfactory interpersonal relationships.
> b. Inappropriate affective or behavioral response to what is considered a normal situational condition.
> c. A general pervasive mood of unhappiness, depression, or state of anxiety.
> d. A tendency to develop physical symptoms, pains, or fears associated with personal or school problems.
> e. A profound disorder in communication or

socially responsive behavior, e.g., autistic-like.

f. An inability to learn that cannot be explained by intellectual, sensory, or health factors.

g. Extreme withdrawal from social interaction or aggressiveness over an extended period of time.

h. Inappropriate behaviors of such severity or chronicity that the child's functioning significantly varies from children of similar age, ability, educational experiences and opportunities, and adversely affects the child or others in regular or special education programs. (*Wisconsin Register*, May, 1990, No. 413, pp. 151-152)

Specific issues in the identification and assessment techniques and instrumentation are reviewed by Epstein and Cullinan (1992). Though they find the process relatively in agreement with the general process, they list six procedures focusing on the multidisciplinary team for improving the technical aspect of the assessment process. Others (e.g., Cline, 1990; Kauffman, Lloyd, Hallahan, & Astuto, 1995; Smith, Wood, & Grimes, 1988; Trent & Artiles, 1995), on the other hand, have focused on a set of entirely different issues that may significantly affect outcomes of youth with serious emotional disturbances. These issues are concerned with systemic problems that may lead to "over" or "under" identification or, more accurately, false positives and false negatives:

1. Youth who need special education programs are not eligible because the definition of serious emotional disturbance excludes youth with conduct disorders or social maladjustments (false negative).

2. Cultural biases in the assessment process that lead to errors in identifying minority youth as having a serious emotional disturbance when they do not (false positives).

3. Legal aspects, cost, and discipline issues that lead to exclusion of non-minority youth as well as minority youth from special education programs and services when in fact they do have a serious emotional disturbance (false negative).

Conduct Disorders and the Federal Definition of Youth With Serious Emotional Disturbances

A fundamental and pervasive debate on the definition of serious emotional disturbances has persisted since the first federal definition was given in 1977 and continues today regarding the issue of conduct disorders. The federal definition relied heavily on Bowers' work in 1960 and 1970 who criticized the definition on several points and concluded that the federal definition missed the crucial point of his work that serious emotional disturbance cuts across all other abilities and disabilities.

On the one hand, students are included in the definition of serious emotional disturbances because their behavior is not consistent with normative psychological behavior, and on the other hand, students with conduct disorders are excluded from the definition because their behaviors are not typical of students. Bowers (1982) argues that it seems inconceivable that some behaviors should be included in serious emotional disturbances because they are deviant from the normative emotional states, and then the federal definition excludes conduct disorders on the basis that they are deviant from normal student behavior.

While federal legislation uses the term "serious emotional disturbance," states have used various other terms, including seriously emotionally disturbed, emotionally conflicted, seriously emotionally handicapped, emotionally handicapped, socially and emotionally handicapped, social or emotional maladjustment, personal and social adjustment problems, emotional disorders, behavioral disorders, and severe behavior handicap (Kauffman, 1985). Though the federal definition is advisory and not mandatory, the exclusion of children who are "socially maladjusted" or have conduct disorders is typically followed by most states. Iowa recognized the need to serve both types of students in their initial definition by defining some as "chronically disruptive" versus "emotionally disabled" but later abandoned the distinction in favor of a broad definition of "behavioral disorders" based on four clusters to provide better services to students. Nevada on the other hand specifically excludes students with "conduct disorders" from special education unless they also have another disability including serious emotional disturbance.

Despite the decision to exclude youth with conduct disorders, there are data indicating that such disorders are relatively common among youth with emotional problems. For example, the National Adolescent and Treatment Study (Greenbaum, Dedrick, Kutash, Brown, Lardieri, Pugh, & Friedman, in press) found that of 708 adolescents aged 9-17 years of age, 66.9 percent were identified as having a conduct disorder, 41.9 percent had an anxious disorder, 18.5 percent had a depressive disorder, 11.7 percent had an attention deficit disorder, and 4.7 percent were identified as having a schizophrenic condition. Similarly, Epstein and Cullinan (1992) report that the most frequent reason for referral to assessment for serious emotional disturbance is a "behavior problem in regular education classes" rather than peer relationship problems, the demonstration of a significant difference from peers, or presenting a danger to oneself or others.

Stephens and Lakin (1995) report that the distribution of children in separate facilities for youth with serious emotional disturbances consist of 47.6 percent serious conduct or behavior disorders, 17.4 percent attention deficit disorder, 9.8 percent anxiety or withdrawal disorders, 7.2 percent psychotic or schizophrenic disorders, and the remaining 18 percent a variety of other disorders.

The Assessment Process and Minority Populations

The Council for Children with Behavioral Disorders, 1989, recognizes that the assessment process for serious emotional disturbances at times is a very subjective process and may indeed suffer from cultural biases. It is not possible to exclude the possibility that false positives do occur and result in minority youth being identified as having serious emotional disturbances when in fact they do not. This source of error could explain why the rate of identification of African Americans with serious emotional disturbances is higher than their proportionate rate in the general population.

In the assessment process for youth with serious emotional disturbances, three major sources of data are used to suggest a potential serious emotional disturbance: (a) bizarre behaviors relating to mental functioning (withdrawn and depressive behaviors, phobias and panic anxiety states, violent and aggressive behaviors, thought processes disturbances represented by hallucinations and delusions); (b) academic deficiencies as indicated by poor grade point averages, poor attendance, test avoidance; and (c) behaviors deviating from the normative for that child. In the assessment process of youth with serious emotional disturbances, the concern is not so much with (a) and (b), but with (c) on "deviation" from the norm where minority cultural behavior could be interpreted as deviation from "white" normative behavior.

Jones (1988) states that the concern with cultural biases in the assessment stems from the fact that minority students are "overrepresented" in special education classes, especially classes for mental retardation. He argues that the problem is that the foundation for deciding on the need for special education is based on assessment of deviance from the norm (a deficit approach) rather than assessment of strengths and weakness. Thus the concern with deficit-based assessment tools is that they only measure deviance from the norm of one cultural group (white) and are not sensitive to the norms for other cultures.

An early study in this area collected data on teachers' referrals to special education (Kelly, Bullock, & Dykes, 1977) who found that twice as many black pupils were identified as behaviorally disordered than white and that white teachers identified more black students than did black teachers. Similarly, Zucker and Prieto (1977), Zucker, Prieto, and Rutherford (1979), and Prieto and Zucker (1981) found a case study to be more often referred to special education if the ethnic background was listed as Hispanic rather than white. In other studies on behavioral disorders by Tobais, Cole, Zibrin, and Bodlakova (1982) and Tobias, Zibrin, and Menell (1983), referral decisions were once again the topic of investigations. In the 1982 study, white, black, and Hispanic teachers were given equal opportunities to refer a case study in which only the ethnic origin was described as white, black, and Hispanic. It was found that more students of ethnic backgrounds different from the teachers' were referred to special education. In the 1983 study, no such effect was found. The 1982 study included more elementary teachers who were assumed to have less experience in the referral process and their inexperience could have contributed to the result. In essence, these studies suggest that the difference in the ethnic background of the student and teacher is more likely to result in a false positive identification.

In a study by Bahr, Fuchs, Stecker, and Fuchs (1991), actual students rather than case study scenarios were involved in a more sophisticated evaluation of the assessment process. The results clearly showed that a significantly larger number of black students were referred to special education by black and white general education teachers. Note that the ethnic background of the teachers in this study did not make a difference, the teachers were not special educators, and the information used was from students who were actually in the school district of the teachers. The interesting aspect of this study was the examination of the effect of different kinds of behavior that were associated with the referral decision. Data collected from the teachers about the students indicated a great concern about academic achievement and black students' academic performance was lower than white students'. The behavioral data failed to distinguish black students from white students. The authors concluded that the referral rates may not have been greater due to the racial differences but may have resulted from the lower academic achievement of black students.

The issue of whether the assessment instruments are biased toward minority groups has been debated not only in the professional literature but also in the court system as indicated by two landmark and opposing decisions (Reschly, 1988). In California, Judge Peckam ruled in the *Larry P. v Riles (1979)* case that the IQ tests should be banned for use with black children if the outcome of the test was used to classify the black student as mild or educable mentally retarded. He rendered his decision based on evidence that he concluded represented discrimination for he found that mental retardation was no more common among the economically disadvantaged than those with greater income. In contrast is the decision from *PASE v Hannon* (1980) from Chicago Public Schools: the judge ruled that IQ tests are valid and do not represent a discriminatory practice. His decision was heavily based on the evidence that mental retardation is more prevalent in lower socioeconomic students. The *Larry P. v Riles (1979)* case was upheld by review courts, while the Parents in Action on Special Education (PASE) withdrew their appeal before the appellate court addressed the case. For a more complete discussion, the reader is referred to the Volume 17 of the *School Psychology Review* in which Reschly, Kicklighter, and McKee (1988) review legal issues and court cases in special education in three articles beginning on page 7 and ending on page 48: Recent Placement Litigation: Part I, Part II, and Part III.

Functional Assessment: Away From Deficit Assessment and Toward Cultural Neutrality

Of all the criticism of the assessment process, the one that seems most susceptible to error and the least valuable to educators is the assessment practice associated with normative data. This type of assessment is considered "deficit" assessment for the results simply document a deficit based on a comparison of ability of individuals performing one task to others who have performed the same task. Often the deficit is assumed to represent a true lack of a critical ability when in fact the deficit may only represent relatively lower functioning on a task valued by the culture of the dominant Eurocentric majority and not necessarily indicative of a lack of skill or aptitude. This criticism is the essence of cultural bias. Some have cited IQ as measured by standard tests as one task of dubious validity, while others suspect personality inventories and the context for assessing reading and math skills as subject to this form of cultural bias. The second concern about such deficit assessment is that it provides little or no information as what to do, i.e., it has no functional utility. Again, IQ scores fit in this category because they are thought to represent permanent and stable innate qualities that cannot be altered by remediation techniques. Consequently, such scores are used to exclude individuals from certain programs on questionable grounds. Other processes are also of concern when the only information provided is a label and not a prescribed course of action to correct the situation.

More and more educators have argued for several changes in the assessment process to ensure that it is a non-biased procedure and not simply a deficit documentation activity. For example, Jones (1988, 1996) refers to the need for a functional assessment approach that objectively assesses the person's ability to accomplish tasks directly relevant to the competency assessed. Functional assessment attempts to avoid tests that are thought to represent a competency, but use tasks that are part of the competency. In vocational areas, a functional assessment does not rely on tests of gross and fine motor skills to assess the ability to assemble parts, but uses a sample of the work task to assess how well a person can assemble the part. In education, a failed test of reading abilities should be followed by a functional assessment in which actual reading assignments are monitored to see where the reading strengths and difficulties are in order to develop a program to assist in spelling, comprehension, word recognition, etc. Another procedure is to collect multiple points of data on the same or functionally similar tasks in different settings, and the third is the use of multiple personnel in the assessment process. Feuerstein, Rand, & Hoffman (1979) offer a more extensive process of dynamic assessment based on exploring multiple facets about the interaction of the person's ability, the environment, and the task at hand.

Though the literature extensively examines possible biases (poor assessment instruments, cultural biases, and legal/cost issues), data have not been found that measure the extent to which any of these potential errors exist on the identification and assessment of youth with serious emotional disturbances and what the impact is on the outcomes for these youth.

Legal Issues, Costs, and Discipline

Schools have become very reluctant to certify a student as having serious emotional disturbances even though the behavior may be abnormal and indicative of a problem. The reason is that the student would have to be kept in school and receive reasonable accommodations or services. Many view the set of behaviors in conduct disorders as disruptive to the school sense of order and discipline and do not want to keep these students in school.

Cline (1990) extensively analyzes the definition problem from the legal aspect rather than the assessment issue. From this perspective, it is not the type of behavior that is of concern, but the compatibility with "good discipline" in the educational setting and conflict with P.L. 94-142, section 504, and the Americans with Disabilities Act. The argument is that certifying a person with a disability provides certain protection under these acts: free and appropriate public education, reasonable accommodation, and freedom from discrimination. These provisions ensure that all students are entitled to inclusion in the least restrictive environment, that schools provide accommodations to ensure that it is least restrictive, and that students would not be removed from that environment due to behavior that is the result of a disability. For example, a student who has a learning disability or mental retardation would not be excluded from school or a classroom because he or she is unable to learn a task. That particular behavior is a result of the disability and it cannot, in a sense, be used to discriminate against the student. Similarly, if a student is aggressive, withdrawn, and disruptive to the class and/or school, the student cannot be discriminated against if that behavior is related to a disability.

The other major factor associated with the assessment process is the cost to adequately serve youth with serious emotional disturbances, especially if there is a need to provide separate facilities or services out of state. The rationale for this bias is that the provision of services would simply be too expensive (Edgar & Siegel, 1995; Maag & Howell, 1992). Consequently, the strategy is to not identify the student as seriously emotional disturbed and save the cost of mental health services or out-of-school placement. Thus, a student with severe mental illness might be excluded from the serious emotional disturbances category as might those who have severe aggressive behaviors.

Finally, there is the philosophical and pragmatic consideration in terms of the value associated with the student's behavior. The question is whether the behavior is part of a disability requiring specialized intervention or whether the student has chosen to behave in such a way as part of his/her life style. Even if there were no legal or cost issues, professionals disagree on the value of the behavior. The essence of these arguments concerns the role of schools. On the one side, these types of behaviors should be treated with harsh discipline to prevent disruption to the school, to protect others, and to teach the students the consequences of their choices. Such behaviors are not to be "rewarded" by coddling "juvenile delinquents." Another view is that these behaviors, while viewed just as negatively, are signals that something is wrong and intervention is to be undertaken. It is not an easy issue and appears to be central to the exclusion of conduct disorders from special education categories.

Classification and Placement

The purpose of this section is to examine how the information from identification and assessment is used in the decisions to classify the student as one with serious emotional disturbances or not and to place the student in what kind of setting. The final decision to place a student in special education involves the collection of relevant information about the student based on the potential problem. Typically, a multi-disciplinary team reviews the information, decides upon the appropriate special education classification, and recommends a type of placement with regard to the protection of the student's right to a free and appropriate public education, least restrictive environment, and needs of the student.

It is at this point where there is fundamental disagreement about the utility of classifying (attaching a label) and the effectiveness of placement in a special education placement category. The disagreement has resulted in a debate that has continued for over a quarter of a century in special education, general education, and the media (e.g., Dunn, 1968; Milofsky, 1974; National Association of State Boards of Education, 1992; Stainback & Stainback, 1991; *U.S. News & World Report*, 1993; *Wall Street Journal* [Special Education's Special Costs], 1993. With respect to the issues germane to youth with serious emotional disturbances, the efficacy issue is confounded by issues involving inclusion and the use of restrictive environments (refer to all of Gable, Laycock, Maroney, & Smith, 1991; Kauffman, Lloyd, Hallahan, & Astuto, 1995; and Muscott, Morgan, & Meadows, 1996, and the introductory sections to Brown, Conroy, Fox, Wehby, Davis, & McEvoy, 1996; Johns, Guetzloe, Yell, Scheuermann, Webber, Carr, & Smith, 1996).

Inclusion for youth with serious emotional disturbances is not an issue because of their innate cognitive abilities nor physical accessibility, but rather directly to the issue of their behavior; their difficulty to teach; the continued threat of challenge to the school order; and the possibility of physical and psychological harm to administrators, teachers, and other students. As noted above, the least restrictive environment must be used with caution due to the legal implications of Individuals with Disabilities Education Act and 504 and ADA. On the other hand, the needs of the students for inclusion and its benefits must also be fully weighed. These issues make this area a difficult and controversial one with no clear answers.

MacMillan, Gresham, and Forness (1996) take this issue on directly and argue for examining the empirical data relating to the positive effects of mainstreaming youth with serious emotional disturbances. They conclude that data are lacking in support of mainstreamed settings always being superior to more restrictive settings and present data that appear to contradict the main arguments for full inclusion: (a) facilitation of social skills, (b) improved attitude of peers toward students with disabilities, and (c) promoted friendships between students with a disability and those without a disability. Presumably, this well written article will not be the last one written in this area, and it does present a significant challenge to the argument for full inclusion. However, the subject of full inclusion is not the primary purpose of this study. For the purposes of this study, two areas of potentially useful strategies on research regarding minority issues are (a) differential classifications and (b) placements in special education.

Classifications of Disabilities and Special Education Program Types

In special education, classification refers to the label included under Individuals with Disabilities Education Act that are used to describe the type of disability a student has. It does not refer to a diagnosis such as the type of serious emotional disturbance. The different labels used in special education are specific learning disabilities, speech or language impairments, mental retardation, serious emotional disturbances, multiple disabilities, hearing impairments, orthopedic impairments, other health impairments, visual impairment, deaf-blindness, and traumatic brain injury. Serious emotional disturbance can also be a secondary disability to any other disability category, and a student with serious emotional disturbances can have another secondary disability. The student is placed in a program according to the primary disability.

Though placement decisions are made by the multi-disciplinary team (M-Team) based on the assessment data, there is a tendency by school personnel to choose certain labels over others whenever possible. For example, the decrease in the number of students labeled as having mental retardation has been accompanied by an equal increase in the number of students with specific learning disabilities. It is presumed that whenever possible the specific learning disabilities label has been chosen over mental retardation. While it is suspected that some serious emotional disturbances are also labeled specific learning disabilities rather than serious emotional disturbances, there are no concrete data to support it. Many youth with specific learning disabilities also experience problems that are similar to problems that youth with serious emotional disturbances have, but are typically identified as only having a specific learning disability.

The other potential decision is that the student does not have a serious emotional disturbance. That decision may be based on rejecting the assessment data as indicating a need for special education or that the student may have a DSM-IV diagnostic label of conduct disorder, which does not in and of itself deem the person eligible for special education. A youth with a conduct disorder may be in special education if the student also has another disability such as serious emotional disturbances, specific learning disabilities, mental retardation, etc., but not on the basis of the conduct disorder or social maladjustment alone.

As noted before, however, the definition from state to state varies and the practice within states and among schools often is subjective enough for youth with conduct disorders to be readily included in programs for youth with serious emotional disturbances. And, the percentage may be quite high depending on how a particular school views these behaviors.

Placement Setting and Least Restrictive Environments

The placement decisions following classification are more than just the recommendation to be part of a program for youth with serious emotional disturbances rather than for specific learning disabilities, mental retardation, etc. The decision also involves placement in the least restrictive environment. Stephens and Lakin (1995) list the different settings that students may be placed in accordance with the Individuals with Disabilities Education Act (P.L. 94-142) as:

> Regular classrooms (i.e., classroom settings in which non-disabled students as well as those with disabilities receive instruction) -- students are considered to be placed in regular classrooms if they receive special education and related services for less than 21% of the school day.
>
> Resource rooms as a supplement to education in regular classrooms (in which students with disabilities receive special instruction outside the regular classroom on a regular basis for some portion of the school day) -- students are considered to be placed in resource room settings if they receive special education and related services between 21% and 60% of the school day.
>
> Separate classes within a regular school building (i.e., classes in which only students with disabilities are enrolled, but which are held in the same school building or campus as classes for non-disabled students) -- students are considered to be placed in separate classes if they receive special education and related services for more than 60% of the school day and are in self-contained special education classes for all or part of the day.
>
> Separate public day schools (public schools

that only students with disabilities attend).

Separate private day schools.

Public residential facilities at which on-site educational services are provided (these include state-supported or operated residential schools for students with hearing or vision impairments, as well as state- and locally-funded residential facilities for children and adults with cognitive impairments such as mental retardation, physical impairments, and emotional or behavioral disorders).

Private residential facilities at which on-site educational services are provided (including residential treatment programs in which on-site educational services are provided).

Homebound or hospital-based instruction.

Correctional facilities.[1]

Unlike other disabilities, youth with serious emotional disturbances present a challenge as to where to place them from a moral and logical sense. These youth who have been aptly described as "sad, bad, mad, and can't add" (Friedman & Kutash, 1986) are the legacy of earlier attempts at hospitalization and reform schools. Separate facilities are a variant of these. Stephens and Lakin (1995) provide a comprehensive examination of separate facilities for youth with serious emotional disturbances. They found that youth with serious emotional disturbances make up a greater proportion of all youth in separate facilities than the proportion of all youth with disabilities.

Placement practices involve the decision of where to serve the student and thereby affect the type of program received. Placement in least restrictive environments tend to use primarily general education teachers and the special education teacher as a consultant. As the environment becomes more restrictive, greater is the segregation from other students and greater is the degree of control over a student. The placement decision is typically based on the student characteristics. More restricted environments are used with students who exhibit more severe impairments. As noted earlier, Coutinho and Oswald (in press) found evidence that being white was associated with a greater likelihood of inclusion in regular classes. Others have found a similar trend (see Glassberg, 1994, in references to Oswald).

Classroom-Based Techniques

This section examined data on the efficacy of the types of approaches used by teachers in their classrooms and the schools. The titles of many books about strategies use the following terms: "behavior management" (Mathur, Quinn & Rutherford, 1996), "best practices for managing behavior" (Johns, Guetzloe, Yell, Scheuermann, Webber, Carr, & Smith, 1996), "effective strategies for teaching appropriate behavior" (Rutherford, Quinn, & Mathur, 1996), "reducing undesirable behaviors" (Polsgrove, 1991). The focus of these and other efforts is directed toward behavior management in the school settings. Other efforts are directed toward teaching critical thinking skills and decision making.

These strategies, detailed in Table 1-1 of Chapter 1, were organized under (a) Behavior Enhancement, (b) Behavior Reduction, (c) Cognitive Behavioral, (c) Social Cognitive, (d) Transition School to Work Curriculum, (e) Teaching Strategies, and (f) Others. Generally, the teachers of youth with serious emotional disturbances are required to be an educator, a marine drill sergeant, a priest, a therapist, and a perfect parent all rolled into one. At the same time, they are required by the administration to maintain good order and discipline for the school and meet the needs of each of their different students. It is not surprising that often the skill repertoire of the teacher is eclectic with a focus on the behavioral control techniques. Perhaps the most difficult aspect of this study is the validity of the assumption that the concept of "Program" represents a causative link to the outcome behavior of students with serious emotional disturbances.

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[1] Correctional facilities have not been uniformly included as a separate reporting category.

That assumption requires many related assumptions each of which affects the educators' confidence that placement in a program for youth with serious emotional disturbances is directly related to the outcomes reviewed in this study. As shall be made clear in the next chapter, the first problem is that program practices as given in Table 1-1 (Chapter 1) are not reported for any of the studies in relation to the in-school and post-school outcomes. What is available is research that reports on the efficacy of certain techniques to control target behaviors, i.e., the reduction of negative behaviors in behavior reduction programs, the impact of self-monitoring on the target behavior, the acquisition of social skills in a social skills training program, etc.

Each of the techniques in and of itself has empirical data to support its use. Unfortunately, that empirical research is often based on a special implementation of the technique under scientifically controlled conditions that are different from the complex classroom, school, and community environment. They rarely represent everyday programs for youth with serious emotional disturbances. Nor do they often report the permanence of behavior change nor their generalization. The research that is needed is that which examines (perhaps defines) what the teacher of youth with serious emotional disturbances does on an everyday basis, first in terms of the expected daily output, and then of the impact on the students' school, home, and social life while in school and followed up over years. At the present time, there is an inadequate database.

Many of the studies of the efficacy of the approach deal with the specific behaviors in question rather than the types of in-school outcomes and post-school success that is the focus of this review. Though the literature indicates that teachers use an eclectic approach rather than a 'pure' program type, it also may be that teachers do not have a clear sense of what is effective or not. There is the concern that a program, pure or eclectic, is not formally designed and implemented according to the necessary conditions for ensuring success. In addition, there is the possibility that school-based programs for youth with serious emotional disturbances are not designed to affect key in- and post-school success, or these measures are affected by more powerful events in the youths' environment.

Two earlier meta-analyses, however, have focused on selected aspects of programs for youth with serious emotional disturbances: Carlberg and Kavale (1980) and Skiba and Casey (1985). In the first meta-analysis Carlberg and Kavale (1980) selected 50 studies on the effectiveness of special education out of the potential pool of 860. The earliest of the studies were in the 1950s with most being in the 1960s and 1970s. The studies included data obtained on various types of disabilities and ages (from headstart to high school) and examined various types of outcomes from the studies. Outcome measures were subdivided into effects on achievement, social/personality, and others, but none of the outcomes were related to post-school outcomes. The population included about 27,000 students with a mean age of 11 years and a mean IQ of 69. The overall effect size was a -.12 that indicated that special education classes were inferior to regular education classes. The mean size of effect did not differ statistically for the different types of outcomes.

The impact of the type of disability was examined by classifying effect sizes according to educable mentally retarded (EMR), slow learning (SL), or learning disabled and behavioral disordered (LD and BD/ED). Note that all the data were collected prior to the passage of Public Law 94-142. The mean size of effects was a -.14 for EMR based on 249 effect sizes, a -.34 for SL based on 38 effect sizes, and a .29 for LD and BD/ED based on 35 effect sizes. The mean size of effects for the group of youth with specific learning disabilities or with serious emotional disturbances was significantly different from the others two groups. The group of youth with LD and BD/ED appeared to benefit more from special education classes than their peers who were in general education classes. There were no interaction effects between type of disability and outcome.

The data from Carlberg and Kavale (1980) suggested that youth with serious emotional disturbances may benefit from special education classes tailored to their needs, but the mean size of effect also included data obtained on youth with learning disabilities. Skiba and Casey (1985) selected 41 studies in which the 833 subjects were all classified as having some form of serious emotional disturbance. From the 41 studies, only 10 studies could be used in computing the 28 effect sizes. Effect sizes were computed for the class of behavior targeted: (a) academic, (b) social interaction, (c) classroom behavior, (d) cognitive, and (e) other.

There were significant differences in the average effect sizes on outcome measures with academic achievement having the largest mean (1.57) based on five studies that all had positive changes in academic areas. Social interactions were the subject of 10 effect sizes with an averaged of 0.69. Classroom behavior was the subject of another five with 0.93 average effect size, and six effect sizes for cognitive averaged 0.81. Based on additional of these effect sizes, however, it was concluded that "only classroom behavior exhibited results that appear stable across analyses" (Skiba & Casey, 1985, p. 244).

Skiba and Casey (1985) also analyzed the potential influence of various approaches within the programs for youth with serious emotional disturbances. They found that reinforcement, aversive procedures (i.e., behavior reduction Techniques in Table 1-1), cooperation, cognitive behavior modification, and behavior consultation were consistently effective based on both the average effect size and the number of positive findings. While social skills training was inconsistently effective with a positive average effect size, the number of positive findings were outnumbered by the number of no effect and negative effects.

The theoretical orientation to programming was also analyzed. Treatments based on behavioral approaches were very robust (22 positive findings out of total of 28), while cognitive learning or a cooperative approach also had positive average effect sizes based on fewer studies. Though the combination (eclectic) approach and psychodynamic approach were effective, the number of studies and subjects was small. Post-hoc analyses indicated that the eclectic approach was not as effective as behavioral, cognitive, and cooperative approaches.

These large effect sizes are impressive, but the small number of effect sizes limits conclusion about the definitive nature of this review. Skiba and Casey's (1985) own conclusions bring more concern to the interpretation of these positive effects:

> The results of the present descriptive analyses are consistent with previous reviews (Grosenick & Huntze, 1983; Lakin, 1983) in finding incomplete descriptions of procedures, poorly conceived designs, and

> inconsistent or inappropriate statistical analyses of results. A reviewer with using more traditional review that discards methodologically unsound studies, might well be left with too few studies from which to write a meaningful review. (p. 246)

The authors continue and raise concerns about the lack of follow-up and the question of generalization and whether they have any "practical value in clinical settings."

Despite the apparent repertoire of techniques, the reliance on behavioral interventions, and their demonstrated efficacy in laboratory and controlled settings, the overall effect of these techniques has been described as having limited success for youth with serious emotional disturbances (Carpenter & Apter, 1988; Grossnick, George, & George, 1987; Nelson & Rutherford, 1988; Smith, 1990; The Peacock Hill Working Group, 1991). The reasons for such conclusions could depend on many factors: (a) shortage of qualified teachers (Carriker, 1989), (b) lack of preparation of mental health providers to collaborate with teachers (Forness, 1989), (c) research on effective intervention for youth with serious emotional disturbances is lacking (Dunlap & Childs, 1996), and (d) the significant possibility that the wrong types of behaviors are being controlled (Knitzer et al., 1990). It is for these reasons that is difficult to assess the relationship between classroom-based techniques and in-school and post-school success.

Though all of these are probable contributing factors, Knitzer et al. (1990a) research based on the observations of the application of classroom techniques brought the most critical attention to the way in which these techniques were used. They coined the phrase "curriculum of control" to convey their conclusion that the main purpose of their application was not to assist youth with serious emotional disturbances, but to ensure compliance with the rules of the school environment.

The Peacock Hill Working Group (1991) cited several successful programs: (a) programs for *early intervention at the pre-school level* (Learning Experiences: An alternative Program for Preschoolers out of the University of Pittsburgh and the Regional Intervention Program in Nashville), (b) programs aimed at teaching a variety of *social skills at the elementary level* (Procedures for the Establishment of Effective Relationship Skills: Hops, Fleischman, Guild, Paine, Street, Walker, & Greenwood, 1978; ACCEPTS social skills curriculum: Walker, McConnel, Walker, Clarke, Todis, Cohen, & Rankin, 1963; Contingencies for Learning Academic and Social Skills: Hops, Walker, Fleischman, Nagoshi, Omura, Skindrud, & Taylor, 1978; Reprogramming Environmental Contingencies for Effective Social Skills: Walker, Street, Garrett, Crossen, Hops, & Greenwood, 1978; Program for Academic Skills: Greenwood, Hops, & Walker, 1977), and (c) two *programs for older youth*, one using a token economy at the junior high level for students who evidenced aggressive and disruptive behavior (Heaton, Safer, & Allen, 1982) and the other involving youthful offenders (Aggression Replacement Training program, Goldstein & Glick, 1987).

Each of these programs reportedly obtained success in different ways. It is notable that no senior high school level program for youth with serious emotional disturbances was mentioned. However, the Stemmers Run program at the junior high level appeared to affect suspensions and expulsions, more passing grades, and a greater rate of entry into high school and a greater rate of graduation than controls (Heaton, Safer, & Allen, 1982). The Annsville Youth Center Project (Goldstein & Click, 1987) found that their detention center aggression training program did reduce behavior incidence and adjusted to the community better than the control group as measured four months after release.

Zigler, Taussig, and Black (1992) examined several early childhood intervention programs and their effect on juvenile delinquency. Longitudinal data from the Perry Preschool Project, Syracuse Family Development Research Program, the Yale Child Welfare Research Program, the Houston Parent-Child Development Center, and some other related programs were reviewed to determine lasting effects on the children. While the data suggested that these programs may decrease antisocial behaviors, it was not clear what the specific contributing factor was. It may be that early interventions programs increase academic success and these students gain acceptance into the school, which reduces their anti-social behaviors. On the other hand, it may be that the anti-social behaviors were reduced resulting directly to social acceptance. Or it may be a combination of both of these factors.

Though these data suggest strengths, many of these programs are aimed at young children or children where the environment can be controlled (i.e., conducive to the management of contingency and behaviors). The Peacock Hill Working Group (1991) acknowledged that a successful comprehensive program for youth with serious emotional disturbances in the public high schools is difficult to achieve but if achieved would consist of the following seven characteristics:

1. The program would apply *systematic, data-based interventions* that can be quantified for measuring success.

2. The program must include *continuous assessment and monitoring* of progress so that successful interventions are continued and ineffective ones discarded as dictated by the results that may change over time.

3. The program must include a provision to *practice the new skills* rather than simply teach the mechanics of the skills.

4. The program must be internally consistent and must logically match the treatment to the problem.

5. The program would involve *multi-components* to meet the variety of needs of adolescents and their families.

6. The program must plan for *transfer and maintenance* rather than short-term quick fixes.

7. The program must be prepared to *commit to sustained interventions* since the problems often are of long-standing duration and will not respond immediately to interventions.

Summary

The assessment data were reviewed for process and content. The two areas of concern were the validity of assessment in and of itself and the validity of assessment for cultural groups. The issues with assessment were those of fidelity and consensus about the definition of serious emotional disturbance. The lack of consensus on the definition and variation in the actual application of definition present significant problems. Complicating this matter is that of cultural bias in the application of these vague definitions. While research and practice suggest the potential for falsely including minorities in such programs, the empirical evidence was lacking as to the extent of this error, with which minority populations is it most likely to occur, and whether it is tied to a specific assessment process or may operate as a general bias. The information on placement simply provided the types of placement involved since placement is one of the outcome variables to be reviewed in the next chapter.

Similarly, the information on classroom techniques was reviewed in terms of the efficacy based on three reviews. These data suggested that these techniques do result in improvement in (a) academic achievement, (b) social interaction, (c) classroom behavior, and (d) cognitive areas. While these data suggest improvements in these areas, there are many concerns about the studies reviewed and even more about the techniques applied in the classroom. The major question that divides the field is not whether techniques are effective in altering behavior, but what impact does the program (placement settings, techniques, and related efforts) have on the student's life and ability to enter successfully into society. These are the questions that are asked of the data by examining key in-school and post-school outcomes in the next chapter.

It is also noted that, despite the availability of a multitude of interventions and strategies, no data were found regarding whether different minority groups did or would respond differently to any of the techniques or strategies listed in Table 1-1. Again, the next section on outcomes will be examining outcome data to identify which of the techniques might improve the targeted in-school and post-school outcomes of this study.

Chapter 5

In-School and Post-School Outcomes

The previous chapter reviewed the processes and some of the issues that are involved in programs for minority youth with serious emotional disturbances. The major purpose of this study was to use key outcome data to empirically identify successful programs for minority youth with serious emotional disturbances. The outcome data in this next section were considered the criteria by which to judge the effectiveness of the different processes that might be used in such programs. Specifically, it was expected that these data would identify effective practices and programs that produce significantly better quality outcomes resulting in more successful participation in school (e.g., higher grade point averages, attendance, etc.), decreased negative behaviors (e.g., reduce suspension, expulsion rates, etc.) increased positive modes for exiting secondary schools (e.g., increase in graduation rates and lowering dropout rates), and increased community/leisure participation (e.g., lower arrest rates, increased participation in school and community sports and activities). These increased rates in positive school outcomes were also expected to affect positively post-school outcomes in employment, post-secondary education, community adjustment, and decreased adult arrest and incarceration rates.

The Outcome Measures

In this project, the criteria sought to judge the effectiveness of these programs were two categories of outcome measures: (a) those occurring in school and (b) those occurring after exiting secondary school. The **In-School Outcomes** include evidence that a program, practice, or technique affected:

Academic participation in school. There are several indicators in this area such as increased GPA, increased course completion, increased attendance, and vocational participation including vocational courses and employment.

School and community participation. The indicators in this area are those of social adjustment while in school such as suspensions or expulsions, arrests, incarceration, and other measures of social participation in the school or community. Also considered may be increased participation in sports and other extracurricular activities.

Changes in least restrictive environments. These are primarily changes in educational placement that resulted in more inclusion such as from self-contained classroom to general education, movement to public school from a separate facility, movement from juvenile facility to public school, as well as the reverse.

Exiting status. The primary indicators are graduation rates (diploma, certificate, GED) and dropout rates

Other. The search was left open to other measures that might be considered relevant to success or failure in school.

The **Post-School Outcomes** include evidence that a program/practice/technique affected:

Employment. Of concern within this area are wage levels, hours worked, type of work, and other characteristics of quality

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employment.

Post-Secondary education. Increased attendance at any type of post-secondary educational setting.

Social and community adjustment. Data on arrest rates, incarceration rates, and general success in the community (living arrangements, social engagement, etc.)

Other. The search was left open to other measures that might be considered relevant to success or failure after exiting the secondary school system.

Documents were reviewed for evidence on differential effects for minority students while in school.

The In-School Outcomes

These outcome measures were selected to gauge the extent to which youth with serious emotional disturbances were succeeding in school in comparison to other youth with and without disabilities. The areas are presented in order of outcomes that would be expected for youth in school. The first area addresses their academic achievement and participation: To what extent are youth with serious emotional disturbances achieving grades, what are their IQ levels, what are their reading and math levels, what kinds of courses do they take, what are their attendance rates, are they promoted, etc. The second area examines the behaviors in school that are likely to decrease their participation such as suspensions, expulsions, and arrest rates. The third area on the least restrictive environment examines the type of school and out-of-school placements (e.g., general education, resource room, separate classroom, separate facility, etc.). The last area examines how they exited public schools (dropping out, graduating, aging out, or unknown). The areas are inter-related and many authors have tied school participation, behaviors, and placement to the manner in which these youth exit. As it will be shown in the next sections, youth who graduate from high school fare better than those who drop out.

The National Longitudinal Transition Study, (Wagner, 1991; Wagner, 1995) provides the most comprehensive data on outcome measures for youth with serious emotional disturbances. This study began in 1987 and was completed in 1994; it is one of the prime sources of data on post-school success of students with disabilities. It is based on 8,000 youth with disabilities between the ages of 13 and 21 who were in special education programs in over 300 school districts across the nation in 1985-86. Data were collected by telephone interviews with parents of young people with disabilities, from their school records, and from interviews with principals and teachers.

Of importance when considering these data across multiple measures of outcome is to remember that these measures are obtained on the same national sample of youth with serious emotional disturbances. For this reason, the National Longitudinal Transition Study (Wagner et al., 1991) will be the primary source for many of these data. Other sources will be used to contrast with the data obtained from the National Longitudinal Transition Study. Another important aspect of the National Longitudinal Transition Study is the analyses that accompany the measures. There are numerous attempts to explain how certain factors are associated with other factors. These analyses are of great value since the data were collected on the same sample and subject to less error than attempting to relate various measures across studies.

Despite the obvious merits of the National Longitudinal Transition Study, caution must be taken when examining the data for youth with serious emotional disturbances. First, the study is a survey of the parents of youth with disabilities and not the students themselves. Second, in some cases the sample becomes exceedingly small with respect to certain factors. The number of youth with serious emotional disturbances ages 13-21 in the study was 779, which represented about 10 percent of the sample of 8,414. In contrast, items related to transition planning for youth with serious emotional disturbances are based on n's of 29-44 (Wagner, 1995). It is therefore important to be cognizant of the sample size for each question of the National Longitudinal Transition Study because other studies may have larger sample sizes in some cases and may also contain more valid comparison groups (e.g., Kortering & Blackorby, 1992; Neel, Meadows, Levine, & Edgar, 1988).

Measures of Academic Participation in School

The data on various measures of school participation are presented in Table 5-1. Though IQ as measured by various tests is not a measure of academic performance, it is important to know whether there are potential cognitive abilities, and IQ tests measure one kind of cognitive ability. According to the data from Wagner et al. (1991), all youth with disabilities have an IQ average of 79.3, but youth with serious emotional disturbances have a higher IQ average at 86.3. Increased school participation (attendance, number of failing grades, GPA, number of course completions, and number of vocational courses) are measures not only relevant to school participation but also associated with decreased rates of dropping out (Wagner et al., 1991). Data on the relationship between ethnic background and IQ levels of youth with disabilities and in particular youth with serious emotional disturbances were not found in the National Longitudinal Transition Study.

Reading and math achievement levels are more of an outcome of academic participation than is IQ. Wagner et al. (1993) reports that all youth with disabilities averaged 3.5 grade levels below their current grade in reading and 3.2 grade levels below in math. While African Americans were significantly different from white in both reading and math (-3.8 versus -3.2 and -3.8 versus -2.8, respectively), youth with disabilities of Hispanic background were far behind at 4.9 grade levels below in reading and 5.0 grades below in math. Youth with serious emotional disturbances were not as far below grade levels in reading as all youth with disabilities (-2.2 vs -3.5) and were the same in math (-3.2 vs -3.2). No ethnic background information was given for grade levels of youth with serious emotional disturbances.

Epstein, Kinder, and Bursuck (1989) reviewed the literature on academic performance of youth with serious emotional disturbances in the 25 years preceding their study. In all, they found only 15 studies that met their criteria. Twelve of the fifteen were conducted on populations in separate psychiatric or residential facilities and one was conducted on youth with serious emotional disturbances in a separate school. Only two of the fifteen were conducted on youth with serious emotional disturbances in their regular school district. The major finding of these studies was that youth with serious emotional disturbances, when contrasted with the non-disabled population, had lower achievement scores in comparison to their chronological age.

Coutinho (1986) was the only study reviewed by Epstein et al. (1989) on youth with serious emotional disturbances who were in their regular schools and for whom grade levels were measured on achievement tests. She also found that youth with serious emotional disturbances in elementary grades had lower reading levels (about 1.5 to 2.0 grade levels below), but this had increased to about 3.5 grade levels below by the time these youth were in secondary schools.

The mean **grade point average** for youth in

Table 5-1. Participation in School of Youth with Serious Emotional Disturbances

Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	Other
IQ	1985-86	Wagner et al., 1991, Table 2-8	National Longitudinal Transition Study	All	79.3	NA	NA	NA	NA
	1985-86	Wagner et al., 1991, Table 2-8	National Longitudinal Transition Study	SED	86.4	NA	NA	NA	NA
Reading/math achievement scores	1985-86	Wagner et al., 1993, Table 3-3	National Longitudinal Transition Study (Reading/Math)	All (Below Grade)	-3.5/-3.2	-3.2/-2.8	-3.8/-3.8	-4.9/-5.0	NA
	1985-86	Wagner et al., 1993, Table 3-3	National Longitudinal Transition Study (Reading/Math)	SED (Below Grade)	-2.2/-3.2	NA	NA	NA	NA
	1984	Coutinho, 1986, cited in Epstein et al., 1989	45 students referred to guidance counselor for behavior problems in rural school. (Reading only)	SED (Below Grade Level)	3.5	NA	NA	NA	NA
Grade point average	1985-86	Wagner et al., 1993, Tables 3-8 & 3-9	National Longitudinal Transition Study	All	2.3	2.4	2.0	2.5	
	1985-86	Valdes, Williamson, & Wagner, 1990	National Longitudinal Transition Study, Table 36B	SED	1.7	1.9	1.2	1.7	NA

(Continued on next page)

Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	Other
% one or more course failures in most recent year	1985-86	Wagner et al., 1991, Table 4-7	National Longitudinal Transition Study	All	37.1	NA	NA	NA	NA
	1985-86	Valdes, Williamson, & Wagner, 1990	National Longitudinal Transition Study, Table 36B	SED	43.9	38.2	62.4	45.2	NA
Annual number of days absent	1985-86	Wagner et al., 1993 Tables 3-1 and 3-2	National Longitudinal Transition Study	All	13.1	12.2	16.5	11.2	NA
	1985-86	Valdes, Williamson, & Wagner, 1990	National Longitudinal Transition Study, Table 36B	SED	17.7	16.3	21.5	17.7	NA
% retained in their current grade at the end of the year	1985-86	Wagner et al., 1991, Table 4-12	National Longitudinal Transition Study	All	8.6	NA	NA	NA	NA
	1985-86	Wagner et al., 1991, Table 4-12	National Longitudinal Transition Study	SED	16.1	NA	NA	NA	NA

secondary school is 2.6 on a 4.0 grading scale (Wagner et al., 1991, pp. 3-18). For youth of all disabilities, the grade point level is 2.3 with African American youth achieving a grade point of 2.0 in comparison to white youth at 2.4 and Hispanic youth at 2.5. For youth with serious emotional disturbances, the average cumulative grade point average was 1.7 on a 4.0 scale (Valdes, Williamson, & Wagner, 1990). Youth with serious emotional disturbances tended to have lower grade point averages in grades 9 and 10 at 1.5 with the grade point average rising to a cumulative of 2.1 by 12th grade. The grade point average probably rose due to the dropping out of poorer students.

Ethnicity appears to be significantly related to grade point average. For all students with a disability, there are noticeable trends by racial/ethnic category (Wagner, Blackorby, Hebbeler, 1993). Students with disabilities of white racial background earned higher cumulative GPAs than the African American youth with disabilities (2.4 versus 2.0), but Hispanic youth with disabilities were very similar at 2.5 even though their initial 9th grade GPA was 1.8. Wagner et al. (1993) hypothesize that the average GPA for youth with Hispanic backgrounds catches up again because the poorer students have probably dropped out of school by this time.

African American youth with serious emotional disturbances have a cumulative grade point average of 1.2, while the white youth cumulative grade point average is 1.9, and the Hispanic youth grade point average is 1.7. It is of importance to note that the grade point averages for low income (under $12,000) and middle income ($12,000 to $24,999) youth with serious emotional disturbances were equal at 1.7, while grade point averages of youth with serious emotional disturbances from higher income (over $25,000) households only rose to 1.9. Thus, it would appear that African American youth with serious emotional disturbances receive lower grade point averages regardless of socioeconomic status (Refer to Table 36B on page 144 of Valdes et al., 1990).

Course failure was measured by the percentage of students who had experienced one or more failing grades in the most recent school year. For all youth with disabilities, 37.1 percent had received at least one failing grade in the last year. For youth with serious emotional disturbances who had received grades, course failure occurred for 43.9 percent of these youth. Overall, youth with serious emotional disturbances (and learning disabilities) had the lowest GPA and were most likely to fail a course even though youth with serious emotional disturbances had reading and computational abilities much closer to their own grade level (Wagner et al., 1993). As it would be expected based on ethnicity differences in grade point average for youth with serious emotional disturbances, more African American youth had received a failing grade in the last year (62.4%) than white (38.2%) or Hispanic (45.2%) youth with serious emotional disturbances (Valdes et al., 1990).

All youth with disabilities were **absent** an average of 13.1 days per year. African American students of all disability types tended to miss school more than their white counterparts (16.5 versus 12.2). As with the GPAs, all students with a disability of Hispanic background tended to miss more school than students of white background initially (18.8 days), but again the difference between students with Hispanic and white backgrounds were no longer significant by the senior year (Wagner et al., 1993). Youth with serious emotional disturbances were absent an average 17.7 days per year (Valdes et al., 1990), which was on the high end for all disabilities along with students with other health impairments. African American youth with serious emotional disturbances missed 21.5 days per year, while white youth missed 16.3 days, and Hispanic youth missed 17.7 days per year.

Retention in their current grade for youth with serious emotional disturbances at 16.1 percent was nearly twice the rate for all youth with disabilities (Wagner, 1991).

School and Community Participation

This area of outcome addresses measures of behaviors that are indices of adjustment to school and community settings. All the data for this area are from the National Longitudinal Transition Study as reported in Wagner et al. (1991) and are presented in Table 5-2.

Youth with serious emotional disturbances are typically in the 14-18 age group, living with their parents (88.8%), and are required to attend school (Wagner et al., 1991). Outcome measures were sought that were appropriate to this age group. One area is that of suspensions and expulsions. Reductions in these types of behaviors keep the student in school. Another area is that of being arrested while in school. Other measures are those such as employment and social engagements such as sports and increased leisure activities within the school or community. The primary concern is that of increasing participation in acceptable school activities and/or community activities.

The statistical almanac for youth with serious emotional disturbances from the National Longitudinal Transition Study for the school years 1985-87 (Valdes et al., 1990) indicates that 5.3 percent of all youth with serious emotional disturbances were suspended or expelled from school. The rate for African American youth with serious emotional disturbances was 8.9 percent, while the rate for white youth with serious emotional disturbances was 5.1 percent. Note that data for all youth with disabilities were not found in other National Longitudinal Transition Study reports for suspensions or expulsions. Harry (1994), however, summarizes data from the Office of Civil Rights Survey of 1990 that indicate that African American males (non-disabled) are recipients of suspension or expulsions at a rate of 22.56 percent even though they account for only 8.23 percent of the total school enrollment nationally.

The **arrest rate** for youth in the general population is 5.8 percent and 7.8 percent for youth without disabilities, but with similar demographic characteristics. For youth with serious emotional disturbances, the rate was 19.8 while in secondary school (Wagner et al., 1991). This rate was twice that for all disabilities and learning disabilities (both at 9.0%) and several times that of other disability groups (0-6%). The Valdes et al. (1990) report on the statistical almanac indicates that the combined arrest rate for all youth with serious emotional disturbances who were either in school or out of school at the time the 1987 data were collected did not differ among the African American, Hispanic, or white ethnic groups (combined in- and out-of-school rates of 26.3, 29.7, and 24.4, respectively). For more information on arrest rates, refer to arrest rate under the post- school outcomes section later in this report.

A majority (64.5%) of youth with serious emotional disturbances had **paid employment** in the last year while in school, while the average rate of employment for youth of all disabilities was 56.0 percent. Wagner et al. (1991) cites studies indicating that 57 percent (U.S. Department of Labor, Current Population Survey for youth age 16-17) to 61 percent (D'Amico, 1984 for 11th graders) of high school students in the general population worked while in school. These data suggest that the youth with serious emotional disturbances work as much as other students.

The National Longitudinal Transition Study (Wagner et al., 1991) reported on **social**

Table 5-2. In-School Measure of Various Behaviors of Youth With Serious Emotional Disturbances From the National Longitudinal Transition Study

Area Measured	Table and Page in National Longitudinal Transition Study	Disability Types in Sample	Findings in Percent of Total Target Population				
			Total Sample	White	African American	Hispanic	Other
Arrest rates in school	Table 6-20, p. 6-40 Wagner et al., 1991	None - general cohort	5.8	NA	NA	NA	NA
	Table 6-20, p. 6-40 Wagner et al., 1991	None-demo match cohort	7.8	NA	NA	NA	NA
	Table 6-19, p. 6-39 Wagner et al., 1991	All	9.0	NA	NA	NA	NA
	Table 6-19, p. 6-39 Wagner et al., 1991	SED	19.8	NA	NA	NA	NA
Employment (paid employment in last year)	Fig. 8-1, p. 8-4 Wagner et al., 1991	All	56.0	NA	NA	NA	NA
	Fig. 8-1, p. 8-4 Wagner et al., 1991	SED	64.5	NA	NA	NA	NA
Social engagement (% isolated)	Fig. 6-2, p. 6-4 Wagner et al., 1991	All	13.6	NA	NA	NA	NA
	Table 41b, p. 160 Valdes et al., 1990	SED	9.3	5.4	10.2	21.2	NA
Group membership	Fig. 6-4, p. 6-21 Wagner et al., 1991	All	41.2	NA	NA	NA	NA
	Table 41b, p. 160 Valdes et al., 1990	SED	30.7	30.2	34.8	23.3	NA

activities of youth with disabilities in school and post-school. Less social engagement was found for students with less functional abilities (mental retardation) and self-care abilities (orthopedic). On the other hand, youth with serious emotional disturbances were not less likely to be socially isolated than the average for all disability groups, 9.8 percent versus 13.6. However, the rate for some youth (multiply handicapped and blind/deaf) was as high as 65 percent. Youth with serious emotional disturbances appeared to be at a low level of social isolation in comparison to other youth with disabilities. In contrast, youth with serious emotional disturbances were less likely to belong to a formal group than those with learning disabilities (34.4% versus 45.2% and 41.2% for all disabilities).

Changes in the Least Restrictive Environment

As part of special education programming, students are "placed" in an environment to facilitate their educational attainment. Educational placement is a formal process following the identification, assessment, and classification resulting in the development of the Individual Education Plan. Under the Education for All Handicapped Act (P.L. 94-142), all students not only are guaranteed a free and appropriate education but also are to be educated in the "least restrictive environment," consistent with their needs related to the disability with regard to education. Placement choices can be general education classes with or without some modification or support depending on the disability, resource room, separate classroom, separate school, or out-of-state placement. The least restrictive environment for youth with serious emotional disturbances may range from inclusion in the general classroom with support to total isolation from the school, community, and family in a correctional facility. Not only is there a wide range of LREs, but the LREs can be a combination of these options such as an African American student being in mainstreamed classrooms 40 percent of the time, a resource room 30 percent of the time, and a separate classroom 30 percent of the time. In general, the more restrictive the environment, the more severe impact the disability has on the person and/or on the school.

The discussion of the least restrictive environments leads to the issue of inclusion/exclusion and how to balance the rights of the individual with a disability with the rights of others in the educational process. This issue is of central concern for youth with serious emotional disturbances, for many times the behavior of these students is disruptive to the educational process as well as presenting real physical danger. And, in some instances, there is a deliberate effort by these students to be excluded (out of the classroom and school through suspension and expulsion). The clash between balancing the right of the individual and that of the school is also found in the definition of youth with serious emotional disturbances. The exclusion of socially maladjusted and/or conduct disorders from the definition is based on the concern about extending the legal protection of Individuals with Disabilities Education Act to students with these characteristics. Yet, on the other hand, these students are problematic for the school and need some type of "special education" (Kauffman, Lloyd, Hallahan, & Astuto, 1995).

Measuring status and movement among least restrictive environments is an important outcome variable. And, are minority students likely to be in more or less restrictive environments? Not only do the physical components of the restrictive environment differ but so do the techniques. The nature of least restrictive environments was explored earlier in the process section (Chapter 4). In this section, data will be reviewed on changes in least restrictive environments.

The annual reports to Congress on the implementation of Individuals with Disabilities Education Act contain data on the placement of youth with disabilities in different settings as part of special education. These settings are listed in Table 5-3.

For 95 percent of youth of all disabilities, about one-third are educated in the regular classroom (39.91%), resource room (31.66%), or separate classroom (23.45%) of the school. The remaining five percent are educated in other separate facilities (school, residential, or homebound/hospital). In contrast, less than 82 percent of youth with serious emotional disturbances are educated in the same school district as their peers without disabilities and about 18 percent are educated in another setting. Of the settings within the general school (regular education classroom, resource room, and separate class), the most frequent setting for youth with serious emotional disturbances was a separate classroom at 35.22 percent, followed

Table 5-3. Different Educational Environments for All Youth With Disabilities and Those With Serious Emotional Disturbances

17th Annual Report to Congress (1995) for the Number of Children Age 6-21 during the 1992-93 School Year

Area Measured	Table	Findings					
		Disability Type	Total* Sample	White	African American	Hispanic	BIA** Count
% in Regular Classroom	AB2 on page A-42	All	39.81	NA	NA	NA	50.46
	AB2 on page AB-50	SED	19.62	NA	NA	NA	26.62
% in Resource Room	AB2 on page A-42	All	31.66	NA	NA	NA	41.00
	AB2 on page AB-50	SED	26.65	NA	NA	NA	55.70
% in Separate Class	AB2 on page A-42	All	23.45	NA	NA	NA	6.32
	AB2 on page AB-50	SED	35.22	NA	NA	NA	11.41
% in Public or Private Separate Facility	AB2 on page A-42	All	3.68	NA	NA	NA	0
	AB2 on page AB-50	SED	13.74	NA	NA	NA	0
% in Public or Private Residential Facility	AB2 on page A-42	All	0.83	NA	NA	NA	2.22
	AB2 on page AB-50	SED	3.48	NA	NA	NA	6.26
% in Homebound Hospital Environment	AB2 on page A-42	All	0.54	NA	NA	NA	0
	AB2 on page AB-50	SED	1.28	NA	NA	NA	0

The following counts are from Table AA4 on page A-4:

*Total including BIA Count = 4,786,065
Total serious emotional disturbances = 414,279

** BIA=Bureau of Indian Affairs = 6,447
Total serious emotional disturbances = 484

by a resource room (26.65%), and the regular education classroom was last at 19.62 percent.

Of the 18.5 percent who are placed in another setting, nearly 14 percent are in a separate public or private educational facility, another 3.5 percent are in a residential facility, and the remaining 1 percent are in a hospital or homebound setting. Overall, about five percent of all disabilities are served in a setting other than a district's mainstreamed school.

Separate data are recorded for youth in schools operated under the cognizance of the Bureau of Indian Affairs. The total population of youth with serious emotional disturbances was reported as 484 out of a total of 6,477 or less than one percent of the total population of youth with disabilities in these settings. A higher percentage of these youth with serious emotional disturbances are educated in resource rooms (55.70%), the regular classroom (26.62%), and residential facilities (6.26%) than non-BIA settings. Fewer of these youth were placed in a separate classroom (11.41%). But in comparison to other disabilities within the American Indian population, significantly fewer youth with serious emotional disturbances were in the regular classroom (26.62% versus 50.46%) and more were in resource rooms (55.70% versus 41.00%), separate classes (11.4% versus 6.32%), and residential facilities (6.26% versus 2.22%). Coutinho and Oswald (in press) analyzed the placement trends of students with mental retardation, specific learning disabilities, and serious emotional disturbances in three annual reports (1988-89, 1989-90, and 1990-91). Students with specific learning disabilities were most likely to be in the regular classroom (about 13% of students with specific learning disabilities) and most likely to be in a resource room (60%) than other students with a disability. Students with mental retardation were most like to be in a separate classroom (60%) than other students with a disability. Students with serious emotional disturbances were most likely to be in a separate facility (20%) than other students with a disability.

For youth with serious emotional disturbances from the period of 1988-1991, the national data show that placements over these years were relatively stable with about 30-35 percent of students with serious emotional disturbances educated in a separate class, another 30-35 percent were in a resource room, about 20 percent in a separate facility, and the remaining 10-15 percent were in the regular classroom. In contrast, the state data like the data for incidence of serious emotional disturbances varies widely. For regular class placement, states vary from near 0 percent placement (Arizona) to 70 percent (Vermont). For resource room, the variability is from about 3 percent (D.C.) to 68 percent (Georgia). It is fairly similar for separate classes with about 3 percent (Vermont) to about 68 percent (Louisiana). The lower range of about 3 to 5 percent for separate facilities occurs in a number of states (e.g., Utah, New Mexico, Georgia, Wisconsin) while the rate climbs to about 40 percent or more in 1991 for District of Columbia, Illinois, New Jersey, Ohio, Maryland, and North Dakota.

The data for placement were correlated with other factors about the students to determine what factors are associated with the placement data. Schools with high white enrollment were more likely to place students with serious emotional disturbances in regular classrooms and least likely to use separate classrooms. On the other hand, various expenditure measures also tended to be associated with greater placement in a separate facility with schools higher in total education revenue being more likely to place students in a resource room and schools with higher per pupil expenditures more likely to refer students to separate facilities.

Though the National Longitudinal Transition Study did not directly record placement, data were collected on the time spent in regular education (Wagner et al., 1991). Youth with serious emotional disturbances spent about 57.6 percent of their time in regular education classes, which was about the same as the average time spent in regular education class for all students with disabilities. Ethnic group differences were reported for all youth with disabilities and not just for youth with serious emotional disturbances. For all youth with a disability, white ethnic groups (60.4%) were more likely to be in general education classes than African American (48.3%) or Hispanic (43.3%) ethnic groups (Wagner et al., 1991, Table 3-15, p. 3-30).

Exiting School: Graduation and Dropping Out

The manner by which students exit the school system is of prime concern to all: students/family, school staff, legislators, and the public. Overall, more students from public high schools are graduating and fewer are dropping out. The case for youth with serious emotional disturbances, however, is vastly different. Most youth with serious emotional disturbances exit public schools by dropping out, more are receiving certificates rather than diplomas, and the status of a particularly large number is unknown. Overall, students exit the school by the following methods:

1. Graduation:
   Diploma
   Certificate

2. Dropping out at various points during secondary school (some return to complete, some pursue a GED, and some never return to complete)

3. Aging out of school (exceeding maximum age) without graduating

4. Other (death, transfer, etc.)

5. Unknown: These are students who have been lost track of and whose status is unknown.

Authors write on several errors associated with measuring the true graduation and drop-out rates (Kominski, 1990; MacMillan, Balow, Widaman, Borthwick-Duffy, & Hendrick, 1990; Rumberger, 1986). The prime concern about "drop-out rate" is the way in which it is defined and measured (MacMillan et al., 1990; Rumberger, 1986). For example, states vary in the length of time before a student is considered a drop-out. In addition, different sources use different ways of measuring the data. The main difference is how those students who return to school or complete a GED are counted. For the U.S. Department of Education "Wall Chart," a state's reported graduation rate is compared to the ninth grade enrollment figure four years earlier. The result is a drop-out based on *attrition* of students and expressed as a ratio of graduates to the number of ninth graders four years earlier. Any student who completes a GED or returns later than four years is not included.

On the other hand, the U.S. Census Bureau uses an *age cohort* to compute the drop-out rate. Typically, the number of graduates are compared to the number of 18- and 19-year olds in school that year. The Office of Special Education programs use *an event drop-out rate* based on the definition of dropping out. Each year, states report the number of special education students aged 16-21 who dropped out based on the state and local school districts' determination of a drop-out based on the applicable definition. MacMillan et al. (1990) indicate that the drop-out rate from the Office of Special Education is different from the attrition rate and the age cohort. They also indicate that the attrition drop-out rate is one half of the age cohort rate for a variety of reasons and that the true rate may be somewhere in between these two rates.

Kominski (1990) has argued for a *yearly* drop-out rate. He uses the data from the Current Population Survey conducted by the U.S. Bureau of the Census to identify the number of students enrolled last year compared to the number enrolled in the current year. Based on other considerations for correcting errors, the yearly rate can be computed for each grade level and other demographic factors. Other drop-out rates are based on cumulative measures over four years. So the yearly rate is likely to be at least one-fourth of the other measures.

For comparison purposes, the national *yearly* drop-out rates for 1968-1985 (Kominski, 1990) show that the rate is relatively stable overall beginning with 5.3 percent for all students in 1968, peaking at 6.4 percent in 1973, and declining to 5.0 percent in 1985. For white students the rate has actually risen slightly and returned to the 1968 levels while for African American students the rate has shown a steady decline from over 11.0 percent in 1969 to about 6.0 percent in 1985. For Hispanic students the rate was not even tabulated before 1972 when it was about 10.2 percent and has remained stable at about 10 percent through 1985. In terms of drop-out rates, the high rate of dropping out by these students is a concern not only now but also in the future with the demographic trends showing that the number of Hispanic youth (ages 0-17) will be 18.6 million and be greater than the 11.9 million African American youth by the year 2020 (Utley, 1995).

Carson, Huelskamp, and Woodall (1993) report on the data from 1980 cohort group in the High School and Beyond data base from the National Center for Educational Statistics. Their analysis indicates that 82.7 percent of the students graduated on time with another 8.0 percent completing by 1986. The completion rate was nearly 91 percent. They also found differences among ethnic groups in the rate of dropping out over the last quarter of a century (1960-1990) with both the drop-out rates for white youth and African American youth declining (17% to 12%, and 28% to 15%, respectively), while the rate for Hispanic youth remained fairly constant at about 35 percent. They attributed the large Hispanic drop-out rate to be a result of the large number of immigrants that made up the school population. However, in New Mexico where a majority of the Hispanic population is first generation and not immigrants, the rate of these Hispanic youth dropping out was still very similar to their representation in the state.

Most research studies tend to use an event drop-out rate by defining drop-out rates based on their own data collection schemes. For example, the National Longitudinal Transition Study (Wagner et al., 1991) is based on a question asking the school what the status of the student was or asking the parent what the status of the student was in terms of graduation or dropping out. Kortering and Blackorby (1992) used the criteria of being placed in an inactive status by the school, not being enrolled in another school, and not being awarded a diploma or its equivalent. The only sources for graduation rates and drop-out rates for students in special education are from the state child counts data submitted to the Office of Special Education and dedicated research studies. The way that each source defines the drop-out rate and its calculation will have to be examined before studies can be compared to one another. *All* the studies on youth with disabilities *used an event drop-out rate* in which the definition of dropping out was given in that study.

Table 5-4 presents the data on various exiting categories (graduation with diploma, graduation with certificate, dropping out, aging out, and unknown) for youth in the general population, youth with all disabilities, and youth with serious emotional disturbances.

The data from the 16th Annual Report to Congress on the Implementation of Individuals with Disabilities Education Act (U.S. Department of Education, 1994) provides national data on the mode of exiting from secondary schools for youth with disabilities. In 1991-92 approximately 67 percent of all youth with a disability graduated with either a diploma or a certificate (43.92% and 13.45% respectively).

For youth with serious emotional disturbances, the graduation rate was about 35 percent (28.11% with a diploma and 6.52% with a certificate). The event dropout rate for all youth with a disability was 22.45 percent and 34.98 percent for youth with serious emotional disturbances.

A very small percentage of youth exited school because they reached the maximum age: 1.89 percent for all youth with a disability and 0.99 percent for youth with serious emotional disturbances. For a significant portion of all youth with a disability, the status of how they

Table 5-4. Exiting Rates From Public Schools for Youth With Serious Emotional Disturbances

Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	BIA Count
% Graduated with Diploma	1979-82	Wagner et al., 1991	NLSY in NLTS: page 5-6, Table 5-1	General non-disabled cohort	75.6 N=6596	NA	NA	NA	NA
	1979-82	Wagner et al., 1991	NLSY in NLTS: 1985-86 page 5-6, Table 5-1	Matched cohort non-disabled	68.4 N=6595	NA	NA	NA	NA
	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 216	All	43.92	NA	NA	NA	37.34
	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 224	SED	28.11	NA	NA	NA	8.06
	1985-87	Wagner et al., 1991	NLTS (85-87), p. 5-6, Table 5-1 (% graduated, may include certificate)	All	57.1 N=1620	NA	NA	NA	NA
	1985-87	Valdes et al., 1990	NLTS (85-87): Table 37B, pp. 149-150. (% graduated, may include certificate)	SED	41.7 N=335	46.0	27.5	NA	NA
	1986-88	Kortering & Blackorby, 1992	Study Sample (86-87) - one school system	SED	20.0 N=101	NA	NA	NA	NA
	1977-84	Bruininks, Lewis, & Thurlow, 1988	Sample of Students who exited state of MN Table 2-19, p. 44	SED	26.0 N=23	NA	NA	NA	NA

(Continued on next page)

Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	BIA Count
% Graduated with Certificate	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 216	All	13.45	NA	NA	NA	8.44
	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 224	SED	6.52	NA	NA	NA	14.52
% Dropped Out	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 216	All	22.45	NA	NA	NA	29.67
	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 224	SED	34.98	NA	NA	NA	48.39
	1979-82	Wagner et al., 1991	NLSY in NLTS: page 5-6, Table 5-1	General cohort	24.4 N=6595	NA	NA	NA	NA
	1979-82	Wagner et al., 1991	NLSY in NLTS: page 5-6, Table 5-1	Matched cohort non-disabled	31.6 N-6595	NA	NA	NA	NA
	1985-87	Wagner et al., 1991	NLTS (85-87), p. 5-6, Table 5-1	All	42.9 N=1620	NA	NA	NA	NA
	1985-87	Valdes et al., 1990	NLTS (85-87): Table 37B, pp. 149-150.	SED	49.5 N=335	44.7	58.2	NA	NA
	1986-88	Kortering & Blackorby, 1992	Event: Study Sample(86-87) - one school system	SED	80.0 N=103	NA	NA	NA	NA
	1977-1984	Bruininks, Lewis, & Thurlow, 1988	Sample of Students who exited state of MN. Table 2-19, p. 44.	SED	74.0 N=23	NA	NA	NA	NA

(Continued on next page)

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Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	**Total Sample**	**White**	**African American**	**Hispanic**	**BIA Count**
% Reached maximum Age	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 216	All	1.89	NA	NA	NA	3.84
	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 224	SED	0.99	NA	NA	NA	0
% Unknown	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 216	All	18.29	NA	NA	NA	20.72
	1991-92	16th Annual Report (1994)	State Annual Child Counts as of 12/1. Table AD-1, p. 224	SED	29.4	NA	NA	NA	29.03

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exited from school was unknown (18.29%), while for youth with serious emotional disturbances the percentage was even higher at 29.4 percent[1].

The 1991-92 data for exiting school indicate that about 65 percent of the youth with serious emotional disturbances either drop out or the status of exiting is unknown. In 1991-92 approximately 34,000 youth with serious emotional disturbances exited the school system with about 12,000 dropping out and 10,000 students exiting with an unknown status. Of the 10,000 students whose status was unknown, three states (California - 1,612, Michigan - 3,404, and Pennsylvania - 1,572) accounted for about 65 percent (about 6,600 youth) of this exiting status. And even though the total of youth with serious emotional disturbances exiting the system from Oregon in 1991-92 was small (less than 500), the status of 80 percent of these students was unknown. The probable status of most of these students is likely to be dropping out, though it is possible for such students to return to regular education, re-enroll, etc. Many such students, however, would have been counted in these other categories.

Oswald and Coutinho (in press) analyzed the state reports of the exiting status of all students with disabilities for 1989-90, 1990-91, and 1991-92 from the *Annual Reports to Congress* (Fourteenth, Fifteenth, and Sixteenth) on the implementation of Individuals with Disabilities Education Act (U.S. Department of Education, 1992; 1993; and 1994). Even though the graduation rate and drop-out rate have been relatively constant over 1989-1991 (no more than one percentage point variance across the three years), the state variability is considerable. Only one state did not give diplomas to youth with serious emotional disturbances (Mississippi); however, 46 percent did receive a certificate in Mississippi. In 1991-92, the graduation rate (diploma and certificate) ranged from 9 to 77 percent and dropping out ranged from 9 to 76 percent. Nor are the data from states consistent. For example, the number of youth with serious emotional disturbances graduating from New York state in 1989 was 35 percent and increased to 77 percent in 1991. Obviously, increases in graduation rates are paralleled by decreases in rates of dropping out, but they are not the exact opposite. With such variability in state data, the national figures can be considered only averages and not normative data for comparison to any given school district in a state.

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[1] In the Seventeenth Annual Report to Congress (U.S. Department of Education, 1995), the changes to the exiting reporting system implemented in 1992 are reported for the first time. Under this format, the data are reported about how the student *exited special education* rather than the educational system and changed the basis for all measures **from an event rate for all students exiting the school in the current year to an annual rate of all students with disabilities age 14-21**.

In addition to graduating with diploma or certificate, dropping out, and aging out, three new categories were added to the exiting format: (a) returned to regular education, (b) moved, known to be continuing, and (c) died. "Unknown" was eliminated as a category and apparently replaced by "moved, not known to be continuing." The changes were piloted in some states in 1992-93, but will be mandatory for all states in 1993-95. This 17th Annual Report does not give total percentages since not all states were reporting under the same system.

The consequences of such changes will be to minimize the differences between various categories since the percentage reported will be much smaller. For example, with the old system only 35% of youth with serious emotional disturbances graduated in comparison to 57% of all youth with disabilities or about a 22% difference. Now in the Eighteenth Report to Congress (U.S. Department of Education, 1996), the graduation rate (diploma and certificate) is 9.11% for all disabilities and 6.82% for youth with serious emotional disturbances for only a 2.39% difference. Similarly, dropping out is reported as 9.19% instead of 35%, but there is not a significant increase in youth with serious emotional disturbances graduating nor those who dropped out. Again, the impact on public perception of reporting a 9% dropout rate as compared to a 35% is fairly obvious.

Oswald and Coutinho (in press) report that the impact of being "white" was not a particularly strong measure in the national statistics though more students of white background aged out than non-white and fewer students of white ethnic groups exited by certificate. Their major finding was that increased expenditure per pupil was correlated with lower drop-out rates.

The data from the National Longitudinal Transitional Survey (Wagner, 1995) indicated that 41.7 percent of youth with serious emotional disturbances graduated from high school while 54.8 percent dropped out, and only a small percentage (3.5%) left school without graduating because they were too old (aged-out). Data were initially collected during 1985-86 and other data were collected as late as 1989-90. The basis for these data for youth with serious emotional disturbances were collected in the summer of 1987. Parent reports and/or school records of the students were used to assign status. The category of unknown was not used.

Kortering and Blackorby (1992) followed up about 100 youth with serious emotional disturbances who exited a large school district (enrollment of about 45,000) in Northwestern United States in 1986-87 or 1987-88. Of these 103 youth with serious emotional disturbances, 22 (20%) had graduated and the remaining 81 (80%) had dropped out. African American students made up 50 percent of the graduates and 55.6 percent of the dropouts even though African American youth made up only 24 percent of the total enrollment. Of the six students who were of other backgrounds (Asian, Native American, or Latino), all dropped out of school rather than graduated.

Bruininks, Lewis, and Thurlow (1988, Table 2-8, p. 52) reported on 466 students with disabilities who exited schools in Minnesota during 1977 through 1984. Of these 466 students, 25 were classified as youth with serious emotional disturbances with 17 dropping out (74%) and 8 graduating (26%). Even though the sample of youth with serious emotional disturbances was small, the overall process measures on this group is of interest. The youth with serious emotional disturbances were most likely to be absent in the 10th and 11th grades more than other students with disabilities, were most likely to be in psychological or chemical abuse programs, and required more and more time from special education staff as they progressed from elementary to junior high to senior high.

The Post-School Outcomes

The experience of these youth in high school is expected to influence their capacity to become contributing members of society. In the next sections, several benchmark measures of becoming a contributing member of society will be examined. The first area will be that of employment and the second will be that of post-secondary education. The third area evaluates the ability of these youth to fit into the community as well as their capacity to have a satisfactory social life. Finally, we will examine the extent to which these youth fall into the opposite end of the continuum and become arrested or incarcerated.

Data on the success of youth with disabilities are contained in follow-up studies of these youth after graduation. Several follow-up studies were conducted in the 1960s and early 1970s with data collected primarily on youth with mild mental retardation and tended to be reported on small groups of students. These data were collected prior to the impact of the passage of the Education for All Handicapped Act in 1975, P.L. 94-142 (now Individuals with Disabilities Education Act), which resulted in the inclusion of more severe disabilities in the school-based system. Hasazi, Gordon, and Roe (1985b) in Vermont and Mithaug, Horiuchi, and Fanning (1985) in Colorado are the earliest of these new studies that followed up special education graduates after the impact of P.L. 94-142 could reasonably be expected to occur. Neither of these studies reported separately on youth with serious emotional disturbances.

The National Longitudinal Transition Study began in 1987 and collected extensive data on all youth with disabilities and reported outcomes for youth in each of the disability categories. Neel, Meadows, Levine, and Edgar (1988) examined the success of youth with disabilities from the state of Washington, while Frank, Sitlington, and Carson (1991) examined both graduates and drop-outs from programs for youth with serious emotional disturbances in the state of Iowa.

Zigmond and McCall (1996) followed up 113 youth with serious emotional disturbances, graduates and dropouts, in a large metropolitan at five different points in time over a two-year period. What distinguishes their study from the others is that most of these youth (97 of 113) had attended a private day treatment school based on the placement decision by the school district that "they were too disturbed or disturbing to be educated" (p. 9) in the special education programs of the public school district.

Almost all the data in the following sections and the accompanying table are from these studies. Data from other significant follow-up studies were included only as they pertained to this study since most of the data were collected on different target populations. For example, Wehman, Kregel, and Seyfarth (1985) followed up 117 youth with mental retardation in Virginia. In Florida, Fardig, Algozzine, Schwartz, Hensel, and Westling (1985) collected data on 113 students with mild disabilities. In California, Semmel, Cosden, and Konopak (1985) examined the success of students after a work placement program. Lichtenstein (1987) used the 1980 sophomore High School and Beyond data set to investigate the job outcomes of youth with selected self-reports of disabilities. Thornton and Zigmond (1987) studied the success of youth with specific learning disabilities after high school. And, Karpinski, Neubert, and Graham (1992) assessed the post-secondary outcomes for 86 youth with mild disabilities in a rural setting who would have graduated in 1987 or 1988. In these studies, youth with serious emotional disturbances were not part of the sample or data were not reported separately for youth with serious emotional disturbances.

Bruininks, Lewis, and Thurlow (1988) studied the success of four groups of youth with disabilities (specific learning disabilities, educable mental retardation, speech problems, and serious emotional disturbances) exiting two school districts in Minnesota during 1977 through 1984. The total number of youth with serious emotional disturbances was 25, and in some analyses the data were based on less than 10 or 5.

Since the data on post-secondary success are primarily from six studies, the designs of these major studies are briefly reviewed. The sample in Hasazi et al., 1985b, included 462 youth with disabilities who exited nine school districts in Vermont during the period of 1979-1983. The study focused on the employment of these students and reasons related to their employment status. The results were based on about 300 students. The racial backgrounds, disability characteristics, or age of these students were not reported. These students exited as early as 1978 and as late as 1983. Since some of the students had dropped out before age 18, the age range could be greater than the six-year range of 1978 to 1983. (Age is important since it is expected to affect employment rates.)

Mithaug, Horiuchi, and Fanning (1985) reported the results of the 1982 follow-up of 234 graduates of 45 different special education programs in Colorado during 1978 and 1979.

The sample was approximately 65 percent male and 38 percent female, ages 21-23, and consisted of students with mental retardation (37.0%), perceptual/communication disabilities (32.0%), physical disabilities (19.0%), and emotionally/behaviorally disturbed (12.0%). None of the data was reported separately for disability category or other demographics. In addition to the National Longitudinal Transition Study (Wagner et al., 1991) that had a sub-sample of 285 youth with serious emotional disturbances, three other studies reported data on the employment status of youth with serious emotional disturbances (Frank, Sitlington, & Carson, 1991; Neel, Meadows, Levine, & Edgar, 1988; and Zigmond & McCall, 1996).

Frank, Sitlington, and Carson (1991) like Hasazi et al., (1985b) in Vermont conducted a study in which the students rather than parents were contacted. Their sample was taken from the state of Iowa during 1985 and 1986 from 15 area education agencies. Of the 2,476 students with disabilities identified for the study, 293 (11.8%) were classified as behaviorally disordered, and of these 200 (68%) participated in the study. Of these, 130 students had graduated or aged-out while the other 70 had dropped out. The overall employment rate for graduates was 58.1 percent while employment rate for drop-outs was significantly lower at 29.9 percent. This study also contains excellent data on number of hours worked, wages, type of work, and differences between males and females with serious emotional disturbances in the labor force.

In Washington, Neel et al. (1988) report on a sub-sample of the interviews made with 2,077 parents of youth with disabilities. This sub-sample consisted of 160 interviews with the parents of youth with serious emotional disturbances who exited from 21 different school districts in the state of Washington during 1978-1986. Of interest was that the study also obtained data from the parents of 542 youth without disabilities who graduated during the same time period and from the same schools as the youth with disabilities.

Zigmond and McCall (1996) conducted post-secondary interviews at 3, 6, 12, 18 and 24 months after secondary school for their sample of 113 youth with serious emotional disturbances, most of whom had been placed in separate private day treatment schools. Most of the graduates (83%), but only a majority of the drop-outs (65%), were "white" rather than minority. The mean intelligence measures of the two groups were equal at full scale scores of 86-88. One of the interesting characteristics that distinguished drop-outs from graduates was that more of the graduates were internalizers (47% vs 27%), while more of the drop-outs were externalizers (63% vs 33%).

Data on employment and post-secondary education were reported only for the differences between graduates and drop-outs for the main purpose of estimating the effect of graduating from high school on post-school success. Differences based on ethnic and gender characteristics were not reported. And, the data appeared to be collected on students from school districts in one county of the Pittsburgh area.

Of these studies, four studies interviewed the students with disabilities (Hasazi et al., 1985b in Vermont; Mithaug et al., 1985 in Colorado; Frank et al., 1991 in Iowa; and Zigmond & McCall, 1996 in Pennsylvania) and two interviewed the parents of these youth (Wagner et al., 1991, on a national level and Neel et al., 1988, in Washington).

The size of the sample for the parents of youth with serious emotional disturbances was 160 (Neel et al., 1988) and 285 (Wagner et al., 1991), while the sample was 200 (Frank et al., 1991) and 113 (Zigmond & McCall, 1996) youth with serious emotional disturbances.

Employment

The employment rate for youth in general, all youth with disabilities, and youth with serious emotional disturbances is given in Table 5-5 along with rates for graduates, drop-outs, various ages, and time since exiting school.

For youth without disabilities in the age group of 15-20, a sample similar to that for the National Longitudinal Transition Study, the employment rate was 61.0 percent and 56.3 percent for the same age group who were matched on gender, race, and socioeconomic variables to the National Longitudinal Transition Study sample. In the Neel et al., 1988 study, a non-disabled cohort from the state of Washington was employed at the rate of 70 percent. The percentage of youth age 18 and 19 (out of school 0-1 year) employed was estimated at 85.0 by the Bureau of Labor Statistics (1988). For all youth with disabilities, the rate of employment was between 45.7 percent on a national basis (Wagner et al., 1991) to 55.1 percent in Vermont. The International Center for the Disabled (ICD) used Harris and Associates to conduct and report on the results of a poll of different groups of citizens with disabilities (1986), employers (1987), and parents and special educators (1989). The initial report in 1986 cited the often quoted result that two-thirds of all disabled Americans between the ages of 16 and 64 were not working and that two-thirds of these people wanted to work. The poll of parents of special education students also asked about the employment after high school and other concerns. The data from parents' reports of the employment status of special education students were considered unreliable (too few responses, n=40).

For all youth with disabilities, graduates had a higher employment rate (55.0%) than drop-outs (39.3%), and males (53.7%) were more likely to be employed than females (29.6%) according to the National Longitudinal Transition Study (Wagner et al., 1991). Mithaug et al., (1985) found the sample of graduates of special education from Colorado to be employed at a relatively high rate of 69.0 percent, but the study did not have any contrast group.

For all youth with disabilities, there appeared to be an association between years out of school and the greater the likelihood of being employed. Youth out of school less than two years demonstrated an employment rate of 52.2 percent with 67.4 percent for those out of school for 2-4 years. The age of the student was slightly different with the rate of employment rising to 52.3 percent for youth age 19 or 20 from the rate of 47.0 percent for youth age 16-18. The rate dropped back sharply to 35.9 percent for youth over 20, presumably because many of these youth were those who were severely impaired and had aged out of secondary school.

The studies reporting on the employment rate of youth with serious emotional disturbances found that the rate was lower than the average for all disabilities at 44.5 percent on a national level (Wagner et al., 1991) or at 48.2 percent in Iowa (Frank et al., 1991). Both of these studies found that graduates demonstrated a differential 20 percentage points or higher than the rates of employment for drop-outs (58.9% vs 38.9% in the National Longitudinal Transition Study and 58.1% vs 29.9% in Iowa). Similarly, males were more likely than females to be employed in both studies (52.1% vs 26.0% in the National Longitudinal Transition Study and 54.5% vs 33.9% in Iowa).

On the other hand, Zigmond and McCall (1996) concluded that there were no differences between graduates and drop-outs based on descriptive data collected at 3, 6, 12, 18, and 24 months after secondary school. Rather than repeat the data, an average employment rate over the five follow-up periods was calculated from the data and is presented in Table 5-5.

Table 5-5. Employment of Youth With Serious Emotional Disturbances After High School

Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	Other
% employed of youth in general population	1979-83	Cited in Wagner et al., 1991	National Longitudinal Study of Youth (Department of Labor) Table 8-11, page 8-26	Non-disabled youth in general	61.0 N=5312	NA	NA	NA	NA
	1979-83	Cited in Wagner et al., 1991	National Longitudinal Study of Youth (Department of Labor) Table 8-11, page 8-26	Matched cohort to NLTS	56.3 N=5312	NA	NA	NA	NA
	1978-86	Neel et al., 1988	Non-disabled cohort of graduates from state of Washington n=793	None, graduates	70.0 N=542	NA	NA	NA	NA
	1987	Bureau of Labor Statistics (1988)	Survey of youth in the labor market (Cited on page 213 of Neel et al., 1988)	Age 18-19 with no disability	85.0	NA	NA	NA	NA
% employed at the time of follow-up of all youth with disabilities	1979-1983	Hasazi et al., 1995b	Vermont sample of special education students who had exited school n=462		55.1, n=301	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Post School Outcomes, Fig. 4-3, p. 4-7 & Fig. 4-4, p. 4-9	All - out of school less than 2 yrs.	45.7 N=1941	53.1	25.5	49.4	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Post School Outcomes, Fig. 4-3, p. 4-7 & Fig. 4-4, p. 4-9	All-out of school 3 - 5 yrs.	56.8	60.8	47.3	50.5	NA

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Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	Other
	1982	Mithaug et al., 1985	Colorado sample of graduates of special education n=234	All - graduates	69.0 n=234	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-14, p. 8-30	All - graduates	55.0 N=1511	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-14, p. 8-30	All - drop-outs	39.3 N-540	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-100, p. 8-25	All - males	53.7 N=1619	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Fig. 8-4, p. 8-21	All - females	29.6 N=1005	NA	NA	NA	NA
	1985-86*	Wisconsin Dept. of Public Instruction 1993 (Transition guide)	Figure 43 page 15: Quoted as from the Department of Education, Office of Special Education Programs, 1992	All - 0-2 years after exiting	52.2	NA	NA	NA	NA
	1985-86*	Wisconsin Dept. of Public Instruction 1993 (Transition guide)	Figure 43 page 15: Quoted as from the Department of Education, Office of Special Education Programs, 1992	All - 1-3 years after exiting	63.4	NA	NA	NA	NA
	1985-86*	Wisconsin Dept. of Public Instruction 1993 (Transition guide)	Figure 43 page 15: Quoted as from the Department of Education, Office of Special Education Programs, 1992	All - 2-4 years after exiting	67.4	NA	NA	NA	NA

(Continued on next page)

Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	Other
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-12, p. 8-27	All - Age 16-18	47.0 N=485	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-12, p. 8-27	All - Age 19-20	52.3 N=1093	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-12, p. 8-27	All - Age 21 or older	35.9 N=898	NA	NA	NA	NA
% employed at time of contact of youth with serious emotional disturbances (in-school and out of school)	1985-86	Valdes et al., 1990	National Longitudinal Transition Study, Table 43B, p. 166: Part-time plus full-time competitive work	SED	41.0 N=622	46.4	27.9	31.5	NA
% employed at time of follow-up of youth with serious emotional disturbances	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Fig. 8-4, p. 8-21	SED	44.5 N=285	NA	NA	NA	NA
	1985-86	Frank et al., 1991	State of Iowa sample of 200 youth with serious emotional disturbances	SED	48.2 N=191	NA	NA	NA	NA
	?	Zigmond & McCall, in press as of 1996	Data collected over 4 years on 113 youth, most in private day treatment schools (97), 64 graduates and 49 dropouts, and predominantly male and white	SED - graduates average over five followup times 3 - 24 mos	44.2 (Calculated from data)	NA	NA	NA	NA

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Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	Other
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-14, p. 8-30	SED - graduates	58.9 N=133	NA	NA	NA	NA
	1985-86	Frank et al., 1991	State of Iowa sample of 200 youth with serious emotional disturbances	SED - graduates	58.1 N=124	NA	NA	NA	NA
	1978-86	Neel et al., 1988	State of Washington Sample	SED - graduates & age outs	60.0 N=160	NA	NA	NA	NA
	?	Zigmond & McCall, in press as of 1996	Data collected over 4 years on 113 youth, most in private day treatment schools (97), 64 graduates and 49 dropouts, and predominantly male and white	SED - dropouts average over five followup times 3 - 24 mos	39.6 (Calculated from data)	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-14, p. 8-30	SED - drop-outs	38.9 N=115	NA	NA	NA	NA
	1985-86	Frank et al., 1991	State of Iowa sample of 200 youth with serious emotional disturbances	SED - drop-outs	29.9 N=67	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-10, p. 8-25	SED - males	52.1 N=215	NA	NA	NA	NA
	1985-86	Frank et al., 1991	State of Iowa sample of 200 youth with serious emotional disturbances	SED - males	54.5 N=132	NA	NA	NA	NA

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Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	Other
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-10, p. 8-25	SED - females	26.0 N=70	NA	NA	NA	NA
	1985-86	Frank et al., 1991	State of Iowa sample of 200 youth with serious emotional disturbances	SED - females	33.9 N=59	NA	NA	NA	NA
	1985-86*	Wisconsin Dept. of Public Instruction 1993 (Transition guide)	Figure 43 page 15: Department of Education, Office of Special Education Programs, 1992	SED - 0-2 years after exiting	45.8	NA	NA	NA	NA
	1985-86*	Wisconsin Dept. of Public Instruction 1993 (Transition guide)	Figure 43 page 15: Department of Education, Office of Special Education Programs, 1992	All - 1-2 years after exiting	48.2	NA	NA	NA	NA
	1985-86*	Wisconsin Dept. of Public Instruction 1993 (Transition guide)	Figure 43 page 15: Department of Education, Office of Special Education Programs, 1992	All - 2-4 years after exiting	48.3	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-12, p. 8-27	SED - Age 16-18	48.0 N=90	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-12, p. 8-27	SED - Age 19-20	49.6 N=108	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study, Table 8-12, p. 8-27	SED - Age 21 or older	39.9 N=66	NA	NA	NA	NA

* Original source is unclear. The original data is most likely from the National Longitudinal Transition Study by Wagner et al., 1991.

The average of 44.2 percent for graduates and 39.6 percent for drop-outs was not significant based on the calculated 2 x 2 Chi-square for these data (graduates and drop-outs, employed and not employed: Chi [0.786, D.F. = 3], p=0.86).

The trend for employment as a function of the age of youth with serious emotional disturbances follows a pattern similar to that for all youth with disabilities (Wagner et al., 1991). The base rate for 16- to 18-year-old youth is 48.0 percent, followed by a slight increase for youth 19-20 to 49.6 percent, and then a significant decrease to 39.9 percent for youth 21 or older.

The trend for youth with serious emotional disturbances as a function of number of years out of school is far different from that for all youth with disabilities (Wagner et al., 1991). It starts at about 45 percent for those who have been out of school 0-2 years (Department of Education, 1992). Though the employment rates for this group are lower than specific learning disabilities (52.9%), it is significantly higher than that for students with mild to moderate mental retardation (35.0%) for this same time period of 0-2 years. The employment rate increases significantly as time out of school increases for most disability groups with the notable exception of youth with serious emotional disturbances. At 2-4 years after exiting, youth with serious emotional disturbances are now employed at the rate of 48.3 percent, youth with specific learning disabilities at 76.2 percent, and youth with mental retardation at 56.5 percent.

Post-Secondary Education

Many of the studies on follow-up of special education students collected data not only on employment but also on other aspects of the students' lives including post-secondary education. Therefore, the sources for these data are nearly identical to those for employment data (Frank, Sutlington, & Carson, 1991; Hasazi, Gordon, & Roe, 1985; Mithaug et al., 1985; Neel, Meadows, Levine, & Edgar, 1988; Wagner et al., 1991). Table 5-6 summarizes the data on post-secondary education from the different studies.

For the National Longitudinal Transition Study, the rate of post-secondary attendance for all youth with a disability is 14.4 percent as compared to 52.7 percent for a group with similar demographic characteristics in the general population or 55.7 in comparison to youth in general age 15-20 (Wagner et al., 1991). The rate for youth without disabilities from the state of Washington was 47.0 percent (Neel et al., 1988). Hasazi et al., (1985) reports only 3.3 percent of the Vermont sample attended post-secondary education, but that may have been restricted to formal enrollment versus attending any post-secondary education as in the National Longitudinal Transition Study.

Ethnic differences in the National Longitudinal Transition Study were not like other trends with white students attending the lowest at 13.6 percent, African Americans at 15.3 percent, and Hispanic youth at 18.9 percent. As expected, graduates attended at a higher rate than drop-outs (21.0% vs 5.2%). According to Mithaug et al. (1985), 50 percent of the graduates in Colorado attended some form of post-secondary education.

For youth with serious emotional disturbances, the overall rate of attendance at any post-secondary education in the last year (as of 1988) was given as 14.8 percent for youth with serious emotional disturbances. Little variation as a function of ethnic background was reported with the rate for white youth with serious emotional disturbances being 13.2, and that for African American youth with serious emotional disturbances was 12.7. No data were available on Hispanic youth with serious emotional disturbances.

Table 5-6. Post-Secondary Education of Youth With Serious Emotional Disturbances

Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	Other
% youth in general attending post secondary education	1978-86	Neel et al., 1988	Non-disabled cohort from state of Washington N=793	None	47.0 N=542	NA	NA	NA	NA
	1979-83	Wagner et al., 1991	National Longitudinal Study of Youth Table 9-1, page 9-7	None	55.7 N=5100	NA	NA	NA	NA
	1979-83	Wagner et al., 1991	National Longitudinal Study of Youth Table 9-1, page 9-7	None, but matched cohort to NLTS	52.7 N=5100	NA	NA	NA	NA
% of all youth with a disability attending any post secondary education	1979-1983	Hasazi et al., 1985*	Vermont sample of special education students who have exited school N=462	All	3.3 N=301	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study Fig. 9-1, page 9-7 and Table 9-3, p.911	All	14.4 N=2269	13.6	15.3	18.9	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study Fig. 9-1, page 9-7 and Table 9-4, p.9-13	All - graduates	21.0 N=2269	NA	NA	NA	NA
	1978-79	Mithaug et al., 1985	Colorado sample of 234 graduates of special education	All - graduates	50.0** N=234	NA	NA	NA	NA
	1985-86	Wagner et al., 1991	National Longitudinal Transition Study Table 9-4, p.9-13	All - drop-outs	5.2 N=2269	NA	NA	NA	NA

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Area Measured	Year	Study	Design and Sample	Findings					
				Disability Type	Total Sample	White	African American	Hispanic	Other
% of youth with serious emotional disturbances attending post secondary education	1985-86	Wagner et al., 1991	National Longitudinal Transition Study Statistical Almanac, Vol 3, Table 42a, pages 163-164	SED	14.8 N=284	13.2 N=202	12.7 N=61	NA	NA
	1985-86	Frank et al, 1991	State of Iowa sample of 200 youth with serious emotional disturbances	SED	7.9 N=191	NA	NA	NA	NA
	1978-86	Neel et al., 1988	State of Washington Sample of parent survey, N=2077	SED-graduates	17.0 N=160	NA	NA	NA	NA
	?	Zigmond & McCall, in press as of 1996	Data collected over 4 years on 113 youth, most in private day treatment schools (97), 64 graduates and 49 drop-outs, and predominantly male and white.	SED, Graduates average over five follow-up times 3 - 24 mos.	50.8 Calculated from data	NA	NA	NA	NA
	1985-86	Frank et al, 1991	State of Iowa sample of 200 youth with serious emotional disturbances	SED-graduates	9.6 N=124	NA	NA	NA	NA
	?	Zigmond & McCall, in press as of 1996.	Data collected over 4 years on 113 youth, most in private day treatment schools (97), 64 graduates and 49 drop-outs, and predominantly male and white.	SED, Drop-outs average over five follow-up times 3 - 24 mos.	16.8 Calculated from data	NA	NA	NA	NA
	1985-86	Frank et al., 1991	State of Iowa sample of 200 youth with serious emotional disturbances	SED - drop-outs	4.5 N=67	NA	NA	NA	NA

* This study included youth with mental retardation, learning disabilities, and serious emotional disturbances, but did not give proportions.

** Any courses after high school for graduates

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Neel et al. (1988) also found a very similar rate for youth with serious emotional disturbances in the state of Washington. Of the 160 youth, 17 percent attended post-secondary school or training while the non-disabled cohort attended at the rate of 47 percent.

Unlike the employment outcomes in the Zigmond and McCall study (1996), there were fairly evident differences in attendance at post-secondary education between youth with serious emotional disturbances who graduated and those who dropped out: 50.8 percent versus 16.8 percent. These percents are averages over the five different follow-up periods.

Community Adjustment and Social Engagement

The National Longitudinal Transition Study (Wagner et al., 1991) utilized a number of measures (training in specific job skills, post-secondary education, employment, and volunteer work) to determine whether students were socially engaged after high school. For Neel et al. (1988) social engagement also was defined by the extent that youth were either employed or participated in post-secondary education or training. These appear to be the only studies attempting to measure the extent to which youth with serious emotional disturbances are making satisfactory adjustment to their community (adjust to society) and the extent to which they may be adjusted as measured by their social participation or engagement.

The National Longitudinal Transition Study found that about 78 percent of all youth with disabilities were socially engaged (Wagner et al., 1991, Table 10-9, p. 10-22). Youth with serious emotional disturbances were engaged at a rate of 69.5 percent as compared to the high of 86.7 percent for hard of hearing and a low of 45.1 percent for multiply handicapped.

In this study's multivariate analysis of social engagement based on all youth with disabilities, it was found that social engagement increased with increases in self-care abilities, functional mental skills, and IQ. Males were more likely to be engaged than females and students from lower income families less likely than higher income. In addition, students who took more vocational courses were the more likely to be socially engaged.

In Neel et al. (1988) the social engagement rate for youth with serious emotional disturbances was nearly identical at 69.0 percent. This study's non-disabled cohort rate of social engagement, however, was 92.0 percent. Both of these engagement measures are highly dependent on the rates for employment and post-secondary education and would be very similar to the rate of not employed and not in school. For Zigmond and McCall (1996), the concept of social engagement was not calculated based on being in school or being employed.

Arrest and Incarceration

On the opposite end of community adjustment and social engagement are measures of asocial behavior as indicated by arrest and incarceration rates. For all youth with a disability, the likelihood of ever being arrested increases with age: about 9.0 percent of all youth had been arrested at least once while in high school and that rate rises to 18.9 percent after high school (Table 6-19 on page 6-39, Wagner et al., 1991). Further analysis of the arrest rate after high school indicates that the rate for youth out of high school less than two years is 19.3 percent, while the rate of ever being arrested is 29.5 percent for youth who had been out of school three to five years (Figure 6-7 on page 6-33, Wagner, D'Amico, Marder, Newman, & Blackorby, 1992).

Youth with serious emotional disturbances are more likely than any other disability group to be arrested after exiting high school. The rates rise from 18.9 percent to 34.8 percent after high school in the first report on arrest rates (Wagner et al., 1991). In further analyses (Wagner et al., 1992), the rate of arrest for youth with serious emotional disturbances who had been out of school less than two years was 36.9 percent (n = 215) and by the time that these youth had been out of school from three to five years, over half had been arrested (57.6% of 221).

Though youth with serious emotional disturbances have the highest rates, other factors relating to arrest and incarceration rates should not be ignored. The National Longitudinal Transition Study data (Wagner et al., 1991, Table 6-22, p. 6-41) report the results of a multivariate analysis as indicating that arrest rates for all disabilities (not just youth with serious emotional disturbances) were associated with being male, older, African American, of a single parent family, and of a lower income. Equally important is that course failure, poor attendance, and dropping out are associated with higher arrest rates for all youth with disabilities (Wagner et al, 1992). For example, the arrest rate for youth with serious emotional disturbances who dropped out of school was about 73 percent as opposed to 35 percent for youth with serious emotional disturbances who graduated (Wagner et al., 1992, pp. 6-35).

Wagner et al. (1992) noted that being arrested is not the same as being guilty of the crime, that is, convicted in court. While the data did not allow determining whether those who had been arrested were also convicted of the crime, data were available on whether individuals were incarcerated at the time of follow up and listed the correctional facility as a place of residence. It was surprising that youth with serious emotional disturbances were not more likely to be incarcerated (during the preceding year) than other youth with other disabilities despite their high arrest rates (p. 6-36).

Other

The National Longitudinal Transition Study reports extensively on a number of different analyses that are the only available data on other measures. The reader is referred to these reports for further information and details. Selected analyses from these reports are included as appropriate. In addition to *Youth with Disabilities: Who Are They Doing? The First Comprehensive Report from the National Longitudinal Transition Study of Special Education Students,* September, 1991, by Wagner and others, several other reports are of interest:[2]

- *The National Longitudinal Transition Study of Special Education Students. Statistical Almanac, Volume 3: Youth Categorized as Emotionally Disturbed.* Valdes, Williamson, and Wagner, July, 1990. This report consists of 43 tables presenting descriptive data on youth with serious emotional disturbances that were collected in 1987, but does not contain the follow-up data in later reports.

- *Dropouts with Disabilities: What Do We Know? What Can We Do? A Report from the National Longitudinal Transition Study of Special Education Students.* Wagner, September, 1991.

- *What Happens Next? Trends in Postschool Outcomes of Youth with Disabilities. The Second Comprehensive Report From the National Longitudinal Transition Study of Special Education Students.* Wagner, D'Amico, Marder, Newman, and Blackorby, December, 1992. This report focuses on the postschool outcomes.

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[2] **Request should be made to: SRI International, 333 Ravenswood Avenue, Menlo Park, CA 94025-3493. Voice: (415) 326-6200; FAX: (415) 326-5512.**

- *What Makes a Differences? Influences on Postschool Outcomes of Youth With Disabilities. The Third Comprehensive Report from the National Longitudinal Transition Study of Special Education Students.* Wagner, Blackorby, Cameto, and Newman, December, 1993. This report focuses on multivariate analysis of various factors that relate to the post-school outcomes.
- *Beyond the Report Card: The Multiple Dimensions of Secondary School Performance of Students With Disabilities.* Wagner, Blackorby, and Hebbeler, 1993. This report addresses the various components of school performance and participation.

Note that all of these reports are based on the analyses of the 1987 original follow-up contacts of parents of the students who were ages 13-21 in the 1985-86 school year and the 1990 follow-up of these same students. Throughout the literature search, reference to these reports or preliminary presentations of the data is numerous. It is important to note that this one study (1996) is the only comprehensive study now available and the previous data are nearly 10 years old.

Summary

The major purpose of these outcome data was to obtain evidence about the effectiveness of the programs for youth with serious emotional disturbances. Unfortunately, in all the studies reviewed, the program was not described in any controlled fashion. The data obtained are considered descriptive of all programs for youth with serious emotional disturbances. The few studies and differing methodology make any statistical combination meaningless and such a strategy may actually detract from emphasizing the obvious lack of detail when conducting studies on the effectiveness of these programs. This lack of attention to major in-school and post-school outcomes places the schools in the position of not being able to explain what works well and what is not working well.

Based on the descriptive data presented in this chapter, there is a fairly clear picture that should be of concern to those who work with these students in the school and community and their family members. This population is mostly male (about 80%), predominantly of white ethnic groups (about 65%), and have an overall intelligence level of 86.4, which exceeds the average for all youth with disabilities (79.3). Their competency in reading and math is below their grade level with their competency in math (-3.2) being the lower of the two. Their grade point average is below that for all youth with disabilities; they fail more courses; and they are retained in grade more often. More than half (about 55%) are educated outside the regular classroom or resource room and in a separate class or separate facility. It is not surprising that they miss more school (17.7 days per year) than the average for all disability groups (13.1 days).

Youth with serious emotional disturbances who are in school are arrested over twice as much as the average for all youth with disabilities and those without any disabilities (19.8% versus 9.0% and 7.8%, respectively). While they tend not to join groups, they are not socially isolated and tend to be employed more often than other youth with disabilities.

The most significant problem is the extent to which these youth drop out of school. The state counts reported to Congress suggest that the drop-out rate is at least 35 percent with the status of another 30 percent unknown. The National Longitudinal Transition Study places the rate in the 50 percent range, while two regional studies indicated that the rate was much higher at the 74-80 percent range. Drop-out rates are known to vary from state to state and school to school. There is a need to better understand the dynamics behind the drop-out behavior of youth with serious emotional disturbances and to implement policies and practices to correct them.

The hope for successful adaptation to post-school community life is slim according to the follow-up studies. The rate for all youth with a disability is about 45-55 percent with some indication that the rate increases with time by about 10 percent. Youth with serious emotional disturbances, however, are at the lower end of the range at about 41-48 percent with the rate finally staying steady at about 48 percent. Males overall do appear to be more frequently employed than females, probably because females may have children to care for at home. The good news is that most studies show that those who graduate do better than those who drop out by a significant margin (a steady 60% for graduates and a 30-40% rate for drop-outs).

Only a small fraction of all youth with disabilities (about 15%) attend post-secondary education, and youth with serious emotional disturbances attend at the same rate. Again, as would be expected, a larger percentage of graduates (about 17%) attend than do drop-outs (less than 6%).

Finally, there is considerable evidence that these youth are not only failing themselves in terms of employment and education but are also experiencing difficulties in adjusting to community life. Youth with serious emotional disturbances are more likely than any other disability group to be arrested after graduation, and this rate climbs from about 37 percent after two years post-school to well over half (58%) after five years.

Chapter 6

The Influence of Moderator Variables

The conceptual model for this study recognized that, in the applied settings of the classroom, school, and community, other conditions may have a significant effect on the capacity for implementing the primary instructional and intervention processes. These other variables could moderate the impact of these processes, and therefore, outcome studies were reviewed for information about the influence of these moderating variables.

There were assumed to be two generic classes of moderator variables: process and context. The **process** moderator variables were those that were directly related to the implementation of the technique and under the direct control or influence of the teachers. The ones that were of interest in this study were the effect of (a) race, culture, and ethnicity; (b) parent and family involvement; and (c) linkages with community resources.

The **context** moderator variables were concerned with the surrounding environment within which the processes were provided. The two of concern in this study were those context moderator variables related to (a) the school (policies, administration, demographics, etc.) and (b) the community (socioeconomic status, cultural, employment rates, urban versus rural, etc.).

Process Moderator Variables

The study explicitly examined whether certain factors under the control of the teacher would have an impact on outcomes. Cultural sensitivity, family and parent involvement, and linkages with community resources were expected to have an impact on the processes. Teachers and parents need to be aware of the potential influence of these conditions that may affect the success of programs for youth with serious emotional disturbances. Administrators need to understand that such conditions require support for teachers in terms of resources, time, and training to competently address these areas.

Race, Culture, and Ethnicity

The areas of race, culture, and ethnicity are potential moderator variables that might affect the efficacy of the processes within the school. The major concern of this project was the rate of representation of minority youth in programs for youth with serious emotional disturbances. In this section, race, culture, and ethnicity are more closely examined in order to understand how these variable may affect the special education process for youth with serious emotional disturbances. For this discussion, race, culture, and ethnicity will use the distinctions and connections for these terms as stated by Wright Saleeby, Watts, and Lecca, (1983). Harry (1992) cites these authors as stating that

> . . . ethnic groups will be so defined if they share a common sociohistory, have a sense of identity of themselves as a group, and have common geographical, religious, racial, and cultural roots. The central core of each ethnic group, welding it together with the thread of belief, styles of being and adapting, is culture. Clearly, because of historical contact and intermingling, different ethnic groups share common cultural elements, and it would be nearly impossible to find an ethnic group unsullied by foreign cultures.

Race is, at this point, a dubious biological distinction. Unfortunately, though, it has signal social importance. (p. 5)

In light of these distinctions, this study will use "ethnicity" as the overall term for representing racial and cultural differences of different groups of people. Culture is the means by which ethnicity is passed on to ethnic members, while race is a description of the different streams of inherited biological characteristics that may or may not be associated with ethnicity. Racism in the form of racial overtones and racial prejudices will not be ignored in this study and will be examined as potential significant influences even though it is not considered a valid biological term.

Most writers have in the past focused on three main explanations for the differences among different ethnic groups in their educational attainments: (a) genetic endowment (Garret, 1971; Ingle, 1970; Jensen, 1969; Shuey, 1966), (b) environmental (Denenberg, 1970; Hunt, 1969; Jensen, 1969; Kagan, 1973; Vernon, 1969; Williams, 1972), or (c) culture (Ciborowski, 1976; Cole, Gay, Glick, & Sharp, 1971). In the genetic endowment explanation, it is simply a matter of differences in ability and very little can be done about such differences.

In the environmental approach, the main argument is that it is the socioeconomic status, single parent, crowding, and other conditions of the environment that cause the differences. Any ethnic group exposed to such conditions would also have similar poor performances. The task then is to remove these "environmental stressors" and the performance will improve. Unlike the genetic explanation, something can be done, but it appears that the causative social conditions must change before the target behaviors would change.

In the third explanation of cultural differences, it is argued that it is the lack of knowledge and insensitivity to culture and language that is responsible for the poor performance. In this case, the need is to train those who educate on the various cultural and linguistic differences. Competent cultural and linguistic training would result in increased school performance.

A number of writers (e.g., Harry, 1992; Ogbu, 1986; Irvine, 1990) have suggested that it is not any of these and that there is a need to understand minority groups not simply as different groups, but as groups who have been and are systematically deprived of equal access, equal opportunities, and equal respect based on prejudices. This explanation is more complex than simply stating that the negative impact stems from prejudices against assumed racial characteristics. It is not only the actions of the dominant (white in the United States) ethnic group but it also involves how minority groups perceive themselves and how their perceptions affect their behavior, goals, and economic success. This fourth theory cites systemic social prejudices and is examined in detail in the next sections.

The Case for Prejudice Against Non-White Ethnic Groups

In the United States, for many the dream of a unique American ethnic group based on the melting of different cultural and ethnic backgrounds into a single, unified, independent race is just that, a dream (Harry, 1992; Neisser, 1986; Ogbu, 1986; Irvine, 1990; Boykin, 1986). Sociologists write about the acculturation and assimilation processes, but many view the reality as that of an American culture based on racial lines, not cultural or ethnic ones. It is further argued that it is not even a matter of different races, but simply a matter of whether one is "white" or not (Harry, 1992).

According to Harry (1992), the evidence for this position is abundant. One example is the way that racial data are defined for collection by the Office of Civil Rights classification scheme (e.g., U.S. Department of Education, 1987).

The major choices are American Indian or Alaskan Native, Asian or Pacific Islander, Hispanic, black (not of Hispanic Origin), and white (not of Hispanic Origin). White is considered to be those ethnic groups who immigrated from the major countries in Europe to America (England, France, Germany, Portugal, Spain, etc.) and not necessarily a racial consideration. For example, if you immigrate from Spain or Portugal, then, you are considered white. If you come from central America or Brazil, then, you are Hispanic. If you are part Hispanic and white or part black and white, you are Hispanic or black, but not white. Another area in which there appears to be logical inconsistencies is the way in which vastly different ethnic groups are lumped together under one racial category. For example, why are all native Americans assumed to be alike and also similar to Eskimos, and only Americans would think that Koreans, Chinese, and Japanese are also alike and similar to Samoans and other Polynesian races or cultures.

The definitions for racial, cultural, and ethnic data are at best very imprecise. For Harry (1992), the current OCR definition appears to reinforce that the only important thing about acceptance into the American ethnic group is the quality of being part of the European white majority and not a non-white minority. Actual distinctions among ethnic, cultural, and racial lines are simply ignored.

In a recent series of articles on color and race (*Newsweek*, February 13, 1995, pp. 63-72), the census categories are also attacked by various arguments all of which are based on the lack of validity of the information transmitted by the current racial choices ("What color is Black?", "Three is not enough," and "One Drop of Blood History"). The current racial categories seem to attempt to separate white from other categories and provide little biological or ethnic information. In addition, the subjectivity of the system is apparent when it attempts to classify the race of children from different races by excluding such offspring from the "white" race if they have a trace of blood from a race of other color.

Despite the limitation in choices on the 1990 census form, individuals indicated that they belonged to one of nearly 300 races or ethnic groups and/or 600 different American Indian tribes. Hispanics alone reported belonging to 70 different categories. According to this article, biologists consider race to be a cultural construct whose categories are defined on the classifier's own cultural norms rather than a biological term with scientific distinctions.

The impact of not being white in the United States is felt in many areas other than a topology of ethnic groups. For example, in comparison to whites (Irvine, 1990)

- The Children's Defense Fund (Edelman, 1986) states that blacks are two to four times as likely to die before adulthood because of inadequate parental or postnatal health care conditions, abuse, or murder; live in a single parent household because of parental death, separation, divorce, or no marriage; live in foster care or custody of a child welfare agency; or are poor, living in substandard housing with an unemployed teenage mother.

- Blacks students, and in particular black male students, are three times as likely to be in a class for the educable mentally retarded and only half as likely to be in a class for the gifted (Irvine, 1990).

- Poor black students are overrepresented in the ranks of school drop-outs and pregnant girls (The Children's Defense Fund, 1986).

- Black children score significantly lower on reading proficiency tests for college than do white youth (National Assessment of Educational Progress, 1985).

- Blacks continue to score significantly lower than whites, Hispanics, and Asians on the scholastic aptitude test (SAT), and the present rate of gain by blacks will take over 60 years for the scores to equalize if the other scores stay the same (Bracey, 1986).

The argument is that it is not due to the genetic endowment of the minority groups but to other factors associated with class prejudices and the way the learner is valued in the learning process, and it is these processes that produce inferior results. But a significant difficulty in this proposition is that all ethnic groups are not inferior to whites. For example, the data above indicate that African Americans exist in less desirable socioeconomic levels and they tend to perform poorer on a number of important tasks (e.g., IQ, college entrance exams, reading and math aptitude tests). Hispanics do not have similar performance problems though the dropout rate for Hispanic youth is very large. Asians tend to gain access to programs for the gifted and talented and to excel. Native Americans appear to have high suicide rates. The question is what are the mechanisms in our society that would account for the variability among the ethnic groups, and how do they exist in educational practices to produce biased effects? Boykin (1986), Harry (1992), Irvine (1990), Neisser (1986), Ogbu (1986), and others provide compelling arguments that the results are based not on race, but are a function of the way people of different minority groups are valued in the United States.

Differential Impact on Minority Groups Due to Class Status

If the major question is why are not all minorities affected in the same way as African Americans, the answer according to Ogbu (1986) is that minority status itself is not the major factor that influences the achievement of different ethnic groups who are in the minority position. The value of being white is what Ogbu (1986) posits as leading to the development of a class system in the United States that is based on the degree to which individuals adopt the white middle class culture and are assimilated into the "white middle class" dominant ethnic group. Minorities vary in their status in the United States:

> In many contemporary societies and certainly in the United States, there coexist several minority groups, some of whom do well in school and on intelligence tests and some of whom do not. What distinguishes those who are not successful from who are? To answer this question, we have suggested elsewhere (Ogbu, 1978) a classification of minority groups into autonomous, immigrant, and castelike minorities. It is the last that frequently is associated with persistent disproportionate school failure and lower test scores. (Ogbu, 1986, pp. 26-27)

Ogbu (1986) argues that other explanations based on genetic endowment (Garret, 1971; Ingle, 1970; Jensen, 1969; Shuey, 1966), environmental (Denenberg, 1970; Hunt, 1969; Jensen, 1969; Kagan, 1973; Vernon, 1969; Williams, 1972), or cultural differences (Ciborowski, 1976; Cole, Gay, Glick, & Sharp, 1971) overlook aspects that are more influential on tests and achievement: (a) ecological context of social skills and schooling, (b) access to ecological resources and activities that affect cognitive skills and schooling, and (c) epistemology, which influences people's perception of and responses to test situations and to schooling.

Autonomous minorities are only minorities in a numerical sense and have cultural frames of reference that encourage and demonstrate success. Even though these minorities are distinct in ethnic, religious, linguistic, and cultural ways and are subject to prejudice, they are neither politically nor economically totally subordinate, and they do not adopt specialized or denigrated roles. Ogbu considers the Amish, the Jewish, and the Mormons examples of autonomous minorities (1986).

Immigrant minorities are those individuals who have come to the United States more or less voluntarily to improve their economic, political, or social status. While these minorities initially find only menial jobs, have little or no prestige, and lack political power, it does not define their status in the social hierarchy. The reason is that this objective socioeconomic status and that perceived by the dominant culture is not how immigrants think of themselves. For a variety of reasons, whether they see their current situation as temporary or they compare themselves to the their peers in the homeland, they perceive of themselves as succeeding or in the process of succeeding. And if they are not succeeding or if conditions in their native land change, they can always return.

These factors allow the immigrants to maintain positive attitudes toward education and economic matters and perhaps enable them to do better on tests and achieve success in the schools. Ogbu cites the Chinese, Filipinos, and Japanese as examples of immigrant minorities (1986).

Castelike minorities are those who are incorporated into the country more or less involuntarily and permanently. Membership is acquired at birth and exists for a lifetime. The members are treated and viewed by the dominant (white in the United States) culture as inferior and less desirable as peers, neighbors, employees, co-workers, and classmates. Castelike minorities lack political power that is reinforced by economic realities and subordinate roles in society. Ogbu states that castelike minorities are likely to develop a "collective institutional discrimination" perspective, that is, they

> . . .do not accept their ascribed menial position. They reject the ideology and beliefs of the dominant group that rationalize their position. They believe that their economic, political, and social problems are due primarily to the "system," due to racism rather than their own individual inadequacies. And they see these problems as more or less enduring. (1986, p. 28)

Castelike minorities are likely to focus more on rejecting the dominant culture and focus on a collective approach to change the system as a prerequisite for their success. Ogbu views African Americans and American Indians as examples of castelike minorities though Mexican Americans, Native Hawaiians, and Puerto Ricans share certain features (1986).

It is important to note that race is often not the issue, as some ethnic groups of the same race do well while others do not. Nor is the issue cultural differences, as some non-white cultures do well and some do not. It is also not whether there are prejudices based on racial or cultural differences; but it is whether differences in racial, cultural, or ethnic backgrounds are pre-judged to be the same, better, or worse than the dominant ethnic group. Do Asians of vastly different ethnic groups do better than the white culture because of their ability, and do vastly different native groups (e.g., African Americans or Native Americans) do worse than the white ethnic group because of their ability, or are there processes in the interaction of different factors that can explain these outcomes? Irvine (1990) provides a description of the process by which devaluing the learner can produce potentially inferior results.

The Impact on the Education of the African American Minority

For Irvine (1990), this Eurocentric approach cannot be used to understand African Americans, which can only be understood from "Afrocentricity". Irvine succinctly presents the basic premise about the impact of minority and black status on the growth, development, and achievement of the black child in the Eurocentric educational system:

> Because the culture of black children is different and often misunderstood, ignored, or discounted, black students are likely to experience cultural discontinuity in the schools, particularly in schools where the majority, or Eurocentric, control, administer, and teach. The combination of Afrocentric children and Eurocentric schools results in conflict because of lack of cultural correspondence and or sync. This lack of cultural sync becomes evident in instructional situations in which teachers misinterpret, denigrate, and dismiss black students' language, nonverbal cues, physical movements, learning styles, cognitive approaches, and world view. When teachers and students are out of sync, they clash and confront each other, both consciously and unconsciously in matters concerning proxemics (use of interpersonal distance), paralanguage (behaviors accompanying speech such as voice tone and pitch and speech rate and length), and verbal behavior (gesture, facial expression, eye gaze). When black students are in sync with their teachers and school, and no cultural contradictions appear to exist, these children can be expected to be more Eurocentric than Afrocentric in their behavior, attitudes, language, style, and use of standard English and language. (1990, p. xviii)

Irvine then continues to provide specific examples of these conflicts and explains how they impact on the black child under A Process Model for Black Student Achievement. The assumption behind this model is that the schools are not a neutral ground for transmitting a body of knowledge, skills, norms, and values that are essential for society. Rather, the schools are the primary form of social control to maintain the status for the elite (whites) that includes ensuring that "low-income and minority persons are 'educated' for less skilled, routine jobs, and conditioned by schools for obedience, the acceptance of authority and external control" (Irvine, 1990, p. 2).

The impact on minority youth in the way that the learner is valued in the school and the way that society values different ethnic groups creates what Boykin (1986) refers to as the "triple quandary." The triple quandary consists of three different perspectives that must be kept in mind by an ethnic minority group member. First, is the need to be cognizant of the way that schools operate in terms of the "white," Eurocentric ethnic approach. Second, they do so from the perspective of a minority group, a perspective they share with other minority groups. And third is the perspective from the culture of their own ethnic group. Furthermore, different members within the same minority group may have other issues to consider such as socioeconomic status, gang culture, etc. (Boykin, 1986).

These explanations regarding differences among minorities and the dominant ethnic group (Boykin, 1986; Irvine, 1990; Ogbu, 1986) offer insight into the impact of ethnic considerations on the educational system. Because they are informative, they offer far more suggestions than a genetic endowment theory. These authors cite the results of being subjected to conditions of prejudice that communicate failure to students, and it is the perception of failure that becomes internalized resulting in poor self-esteem and coping (self-blaming) or externalized (acting out) that is hypothesized to cause continued failure. The castelike minorities succumb to the dominant culture viewpoint of them and extend their own patterns of failure. Changing this pattern is easier if the system's structure is compatible with success for the individual. Perhaps that is why the African American experiences more damage from prejudice than blacks from other countries or other minority groups in the United States.

Relationship to Education and Youth With Serious Emotional Disturbances

The important point from a research point of view is whether these influences can be measured. For this study, the search was for data on the impact on minority youth with serious emotional disturbances. Unfortunately, little research is available in this area.

Clearly, there are some fundamental issues regarding the "cultural" differences and the tendency for the Eurocentric culture to view other cultural expressions of behavior as deficient or lacking (Boykin, 1983). For example, the black culture is said to differ on nine dimensions (spirituality, harmony, movement, verve, affect, communalism, expressive individualism, oral tradition, and social time perspective). Boykin (1983, 1986) emphasizes how important it is to understand the differences among ethnic groups, while at the same time moving on to what he sees as the major task: to enable all minority groups to achieve equal access to societal riches as defined by that ethnic group. And, one must keep Ogbu's (1978) comment in mind that success in the United States will for some time be defined by a Eurocentric approach and that those who wish to compete in this area will need the skills required by this ethnic group.

Family/Parent Participation and Involvement

Numerous studies have found that parent involvement and participation are important for the success of their children in school (e.g., Epstein, 1985; Young, 1993, Ferhmann, Keith, & Reimers, 1987). Others have cautioned not to underestimate the impact of parental involvement and the success that comes for their children in school and later when transitioning to adult life when parents act as advocates for their children (Bennett, 1988; Heumann, 1993; and Nisbet Covert, & Schuh, 1992). Similarly, mental health professionals serving the adolescent population (Duchnowski, Berg, & Kutash, 1995) cite the need to ensure not only parental involvement but participation in family therapy for resolving the emotional problems of these youth.

Wagner et al. (1993) found that the data from the National Longitudinal Transition Study supported the substantial body of literature documenting that parental involvement in their child's education leads to greater success. They found that parental support, as measured for all youth of all disabilities, was a significant factor in reducing the number of days absent and the likelihood of failing a course (Table 5-5, page 5-10). In addition, a multivariate of the comparison of outcome for youth with disabilities (Wagner et al., 1992) found that the student with very involved parents were more likely to attend post-secondary education and be employed than youth whose parents were not involved at all. Youth of not involved parents, however, had higher wages than those students with involved parents.

Of a much broader concern for all youth with disabilities is the active participation, cooperation, and involvement of the parents and family in support of the individual education plan and the remediation and education activities. For youth with serious emotional disturbances, the problems within the school are also likely to occur at home and within the community. The concern is more fundamental in that many envision a system of care or support that is to be wrapped around the family. This view attempts to avoid blaming parents or other family members and instead works with the family to bring about positive change.

In terms of minority youth, there is considerable concern that the schools are not sensitive to the culture of minority parents and, specifically, view minorities as lower class, uneducated, and lacking in social values. What is agreed on is that parent/family involvement is a necessary activity, but the level of involvement is low for all disabilities and perhaps for general education parents and families as well. For some parents, the school is as unpleasant to them as it may be for their child with serious emotional disturbances. It may be because they are not academically inclined, they perceive the school as uncaring, or they see the school dominated and representative of the majority white culture. In any event, positive parent/family involvement is not easy to achieve.

For youth with serious emotional disturbances, there appears to be two sources of parent/family involvement that may overlap. The first is the early involvement of the parents/family in the school environment with its own way of approaching communication and cooperation. The second is through mental health agencies after referral by the schools to social services for assistance. In either case, there is a mandatory involvement at some level by the parent, family, or guardian due to the minor status of the youth. And this mandatory involvement will continue throughout the education and treatment as long as the youth remains a minor or as legally incompetent.

Duchnowski, Berg, and Kutash (1995) review the literature and their own research on families and suggest several parental recurring perceptions: parents report that they perceive professionals as blaming the parent for their child's emotional or behavioral disorder and that they are confused by the technical information and the complicated process involved in placement in mental health settings. Duchnowski et al. (1995) also cite that parents want family friendly information that they can use, proof that their perceptions of their child is valued, and assurance that their culture will be treated with respect.

Eber (1994) lists three strategies for ensuring a family focus:

- More proactive involvement of parents in development of comprehensive interventions plans that merge home and school-based interventions and strategies;

- More contact and involvement with families to help refocus school teams to better address/include parental perspective and coordinate efforts between home and school;

- The capacity to refocus teams to truly listen to parents, assign a team member to function as advocate for the family, and focus external resources to support families beyond the school day.

The need to educate parents has had a renewed priority in the last twenty years within the national government, states, and local schools according to Edwards (1990). As part of the effort to better understand parents, especially those of minority backgrounds, the National Education Association organized four sub-committees to examine and address the needs of blacks, Hispanics, Asian/Pacific Islanders, and Native Americans/Alaska Natives. Mack (1987) , reporting for a sub-committee on blacks, indicated that the concern was with the high rate of course failure, the rapid loss of enthusiasm for school as they leave elementary education and enter secondary education, and the high drop-out rates. Black parents feel unable to advocate for the child's rights and feel uncomfortable in visiting the school or have limited participation in school activities. They feel that some administrators and teachers perceive black students as "poor," unmotivated, culturally deprived and unable to learn. Consequently, many black students receive "dumbed down" instruction, set lower achievement goals, and are pushed into vocational tracks and away from college.

A major concern with Hispanic parents is the English barrier and the high rate of drop out. Hispanic parents often cannot help their children with homework because of their limited English proficiency, are concerned about the language assessment instruments administered by someone other than their teacher for placement in Chapter 1 classes, are concerned about the inclusions of their student in all aspects of school resulting from the emphasis on "English only," and report a great deal of distrust of the school.

For Asian and Pacific Islanders, parents report an inability to understand how the school system works, share Hispanic parental concerns about language assessment and proficiency exams, and do not feel involved in decisions about their children. They also feel that the current pressure on school success may result in more drop out among this group and potential suicides.

Most of the reports from Native Americans focus on the development of community centers that have greater tribal input and are concerned with meeting the needs within the local area. All parent minority groups reported a concern with the schools' understanding their culture, being sensitive to cultural values, and appreciating their culture.

Hale-Benson (1990) stresses the need for cultural sensitivity upon the part of school and recommends that black parents emulate the success-producing strategies of high black achievers as suggested by Clark (1983). These recommended strategies appear appropriate for any parent wishing to have an impact on their child's success in the school system:

1. Frequent school contact initiated by parents
2. Ensure that child has stimulating supportive teachers
3. Parents psychologically calm with student
4. Parents expected to play major role in child's schooling
5. Parents expect child to get post-secondary training
6. Parents have explicit achievement-centered rules and norms
7. Parents establish clear, specific role boundaries and status structure with parent as dominant authority
8. Siblings interact as organized subgroups
9. Conflict between family members is infrequent
10. Parents engage in deliberate achievement-training activities (Clark, 1983, p. 200)

While these suggestions are for all parents, there is a need for parents of youth with disabilities to more fully participate in the individual education plan and transition planning. Parental involvement in the education process appears to decline as the age of the youth increases. At the same time, schools have designed parent-teacher conferences so that there is less contact in high school than in grade school, which contributes to less parental involvement.

Community Linkages

Community linkages involve the schools' establishing formal and informal contacts with agencies and resources outside the school to provide services required. These types of agencies may be those required for speech, hearing, and physical therapy as well as those vocational services and experiences required for transition from school to community. For youth with serious emotional disturbances, two major efforts have led to the requirement for active involvement of the schools in networking with external agencies and resource: (a) Transition from school to work legislation and programs and (b) the Child and Adolescent Service System Program (CASSP). Each effort envisions a "seamless" service delivery system in which youth with disabilities would receive services appropriate to their age and disability need.

From the inception of the transition of youth from school to work movement in the mid-1980s and its culmination in the passage of Individuals with Disabilities Education Act with its strong emphasis on transition planning in September of

1991, there has been an increased emphasis and formal mandate for schools to reach out to community resources and establish cooperative agreements. The resources and agencies that should be contacted are several and will differ with respect to the age and disability of the child. Few employers are involved with young children, private industry councils begin when the child is 14, and vocational rehabilitation involvement occurs later. Action taken by the Division of Vocational Rehabilitation occurs more often with students who demonstrate mental retardation, sensory, and/or physical disabilities Social services tend to be more involved in older students with mental retardation and with students in crises situations such as youth with serious emotional disturbances.

The degree to which transition planning is implemented and is effective proves to be of concern. For example, the data from the National Longitudinal Transition Study have provided even more concern as *no referrals were being made to mental health agencies for youth with serious emotional disturbances* (Wagner, 1995a) who were in their last year of school. Other data from the National Longitudinal Transition Study suggest that about 60 percent of the schools lack the capacity to provide counseling or mental health services (Wagner et al., 1991). Note that these data are prior to the implementation of Individuals with Disabilities Education Act and that even as of 1996, many states are still in the process of fully and formally implementing transition planning and practices. These data are also prior to the initiation of the Child and Adolescent Service System Program.

Even prior to the efforts to formalize transition planning for all youth with disabilities, Knitzer's 1982 book on *Unclaimed Children* focused attention on the failure of the mental health system with findings that two out of three children with serious emotional disturbances received no services. In response to these conditions cited by Knitzer (1982) and others, the National Institutes of Health established the Child and Adolescent Service System Program that is now in place in all 50 states. The concept behind the Child and Adolescent Service System Program was to replace the fragmented service delivery system with a responsible and coordinated set of services designed to meet the needs of all youth with serious emotional disturbances and their families. The efforts by many have led to principles regarding an effective mental health system. Such a system would follow a "System of Care" with core values and guiding principles (Stroul & Friedman, 1986) centered upon the needs of the family in their local community and have the competencies be sensitive to the cultural, racial, and ethical differences of the population they serve.

Additional concepts have evolved out the implementation of the model project under the Child and Adolescent Service System Program such as in the Project Wraparound in Vermont (Burchard & Clarke, 1990), the Alaskan Youth Initiative (VanDenBerg, 1989), Karl Dennis' Kaleidoscope Program in Chicago, and the California System of Care Model (Attkisson & Rosenblatt, 1993), an extension of the Ventura Model. These efforts examine how to ensure that the system of care is *individualized* and that all needed *services are wrapped around* the child and family (Behar, 1985).

Youth with serious emotional disturbances are the target population of both the schools and the mental health system that serve them. And should the schools and mental health system fail to alleviate the problems of such youth, another major system will be invoked in the effort to successfully rehabilitate this population: the corrections system.

School-Based Mental Health Programs

Currently, the focus is upon merging school and community-based systems into an integrated effort (Skiba, Polsgrove, & Nasstrom, 1996). There are trends for some states (e.g., Ohio) to have a mental health case manager in the school. These efforts are attempts to better serve the needs of this population as well as reduce the cost of out-of-state placements for this population, which can run as high as $90,000 or more per month (Dowrick, 1988; Epstein, Nelson, Polsgrove, Coutinho, Cumblad, & Quinn, 1993).

While these efforts are laudable, there is little evidence regarding their success in relationship to the concerns cited by Knitzer (Knitzer, 1982; Knitzer, Steinberg, & Fleisch, 1990a). In addition, Project Wraparound in Vermont reports that its efforts to assist the family at home, do not appear to affect the behavior of students in school (Clarke, Schaefer, Burchard, & Welkowitz, 1992). Studies on the California System of Care have shown positive effects on attendance of youth with serious emotional disturbances in all three counties but inconclusive impact on educational achievement areas (Attkisson & Rosenblatt, 1993).

In the Connections project operated by the Positive Education Program in Cleveland, Ohio, there is a substantial effort to integrate public schools and the various state and local government agencies who are charged with serving youth with serious emotional disturbances and their families. The demographic data on a group of 100 youth who terminated services with Connections mirror the urban setting of Cleveland with about an equal number of youth of white ethnic groups and of African American ethnic groups represented (Cantrell, Cantrell, & Smith, in press). They evaluated success of the program with these youth who terminated services in terms of achieving one of four master goals: (a) prevent child's removal from home, (b) return to family/community, (c) locate an alternate placement, and (d) independent living. While 56 of the 100 had successful outcomes for mental health services, data were not presented on graduation rates, employment, arrests, or post-secondary education. Nor was the age of the youth given so that it could be determined if these were age-appropriate outcomes.

In contrast, Silver, Unger, and Friedman (in press) studied the outcomes for youth with serious emotional disturbances who were randomly selected from a pool of youth who were participating in the National Adolescent and Child Treatment Study (Silver, Duchnowski, Kutash, Friedman, Eisen, Prange, Brandenburg, & Greenbaum, 1992). The main focus was a five-year (1985-1990) comparison of follow-up outcomes between 106 youth placed in residential mental health centers to another 109 youth served in special education in 1990. Overall these 215 youth with serious emotional disturbances had poor outcomes with less than a third completing high school; and of those living in the community, only 60 percent were working or looking for work. The only statistically significant difference between these groups was that those who were living in a residential facility in 1985 were more likely to be living in one in 1990.

The problems in measurement of effect on these youth, in and out of schools, and in mental health treatment centers are immense. The first difficulty is that most studies on mental health have more of an interest in demonstrating positive changes in residential status, behavioral changes on behavioral checklists, and lower costs of services rather than focusing on in-school and post- school success. Another difficulty, like data from special education, is being able to confidently relate the service program with outcomes. The reasons are fairly evident from a methodological point of view: (a) lack of precision in program features, (b) inability to document program implementation, (c) small sample sizes, and (d) lack of an appropriate control or comparison group. One of the many problems in community linkages for this population is the reluctance to seek assistance from mental health clinics, and often this tends to be more of a problem for youth of minority background who do not feel that the clinic is part of their ethnic community. Some states are moving forward to create better linkages of integrated community mental health and social services programs and the schools (e.g., New Jersey, Kentucky, and California). One way to ensure more appropriate mental health services is to locate the clinic on the site of the school (Adelman, Barker, & Nelson, 1993.) Such efforts should more closely examine the need for restructuring community programs and linking them to the schools.

Melaville, Blank, and Asayesh (1993) cite New Jersey's passage of the Quality of Education Act as an example of a statewide system for improving their poorest school system. This effort recognized that the success of the schools was tied to factors outside schools. This effort led to the development of Family/Net teams to undertake systemic change in the local school districts. These teams are part of a system for collaboration that includes Interagency Collaboration Committees from various agencies. Despite the appearance, the effort has not yet demonstrated success even though many of the components are very similar to those in the transition models of Individuals with Disabilities Education Act.

A much stronger case for the restructuring of both the school and community in a comprehensive way is provided by Taylor and Adelman (1996). Given that the schools themselves are not geared toward providing mental health services on their own, the development of a triage system (mild problems, high-frequency psychosocial problems, and severe/pervasive mental health) to address the wide range of problems schools must face appears to be a promising approach for developing a comprehensive capacity for school-based clinics. Such an effort is designed to be less fragmented and more accessible to students and families than other approaches but is not without difficulty in development.

Adelman (1996) describes the pitfalls and solutions to locating clinics on the site of Los Angeles schools. The solutions and principles that were developed from this effort focused on a comprehensive set of goals: (a) restructuring and expanding existing resources for community and school linkages, (b) maximizing the integration of school and community resources, (c) enhancing access to all other community resources by creating direct linkages at a school site, and (d) integrating "Enabling, Instructional and Management Components."

The model itself was built on the experience of the complexity of developing viable community linkages, and it required the restructuring of both the community resources and the schools to achieve viable integrated programs. Of interest in this study were the principles required to operate the enabling component:

(1) *Classroom Focused Enabling* established a system for teachers to increase their repertoire of accommodation and compensatory techniques to work with a wider range of individual differences.

(2) *Student and Family Assistance* emphasized the provision of services to the family and the rationale and need for establishing a Family Service Center.

(3) *Crises Assistance and Prevention* components focused on providing the capacity to respond to crises, provide programs for school safety, violence reduction, suicide prevention, and child abuse prevention.

(4) *Support for Transitions* was provided through a number of activities designed to reduce alienation and increase positive attitudes. Such effort began with orientation activities to provide recreation in safe areas, and to generally keep students informed and prepared to make transitions in and out of school programs and to the community.

(5) *Home Involvement in Schooling* was designed to provide programs for specific parent learning and support needs, mobilize parents as problem solvers when their child had problems, and elicited help from families in addressing the needs of the community.

(6) *Community Outreach* efforts were designed to increase community participation and build linkages and integration with community mental health and social services.

Such a program focused on the needs for multiple intervention strategies and the inclusion of community resources, school personnel, and family in a structured way to bring together the variety of resources to cope with the number of different issues that occur at the school and community level. Of importance for school personnel was the focus on restructuring from the school outward to the community to achieve the goals of the model.

Context Moderator Variables

In addition to the aforementioned moderator variables (ethnic features, family involvement, community linkages) that are hypothesized as affecting the effectiveness of the process, there are other variables that are expected to influence the ability of the teachers, parents, and community resources to work together. The school itself is an environment that has many facets that provide a setting where the students' ability to learn and the staff's ability to teach are positively or negatively affected. Other variables include the community setting of the school that affects the type of students, competing community distractions, and the resources available.

The School

Within the school, the administration policies, staffing decisions, and disciplinary policies are often cited as factors that affect the effectiveness of programs. Other factors include the physical surroundings (Johns et al., 1996) including cleanliness and aesthetic qualities. These factors can result in a positive or negative atmosphere influencing student behavior and staff morale. These aspects are general considerations and would appear valid from the perspective of organizational theories found in elementary industrial psychology and business management courses. Such variables were not examined in relationship to the outcome for youth with disabilities except in the National Longitudinal Transition Study.

Wagner, Blackorby, and Hebbeler (1993) studied various factors about the school environment (school size, economic status, school climate, leadership, and the education of youth with disabilities). Small schools and schools with a lower proportion of poor students had less days missed from school and fewer failed courses than students in larger schools and higher proportions of poor students. Teacher ratings of positive school climate and ratings of confidence in the leadership of the principal were not related to student performance.

The Community

For the community demographics, the concern was upon trends that have been hypothesized to affect the members of a society: concentration of minority population, low socioeconomic levels, single parent families, and urban settings. There are many studies across a number of disciplines that have shown that such factors are associated with a number of negative trends: increased health problems, increased crimes, high rates of dropping out of schools, and lower unemployment rates. At the same time, this body of research has found ethnic background also to be associated with the same negative trends. The problem is that ethnic background and socioeconomic status are confounding variables since several minority populations have a higher concentration of low socioeconomic levels with single family households in urban settings. Therefore, it is important to examine research that has utilized the proper design and statistics to control for this confounding.

In the National Longitudinal Transition Study (Wagner et al., 1991), multivariate analyses were conducted in a number of areas to determine the effects of youth background and community demographics. None of these analyses were conducted separately on youth with serious emotional disturbances but used the entire sample with different disabilities. These analyses attempted also to go beyond the obvious that youth with more severe cognitive disabilities would more than likely have a greater likelihood of having lower school performance and being unemployed. The intent similar to this study was to examine moderator variables that might provide evidence of their contribution to success and failure of youth in school and the community.

In-school measures were related to the effect of moderator variables. Wagner, Blackorby, and Hebbeler (1993) found that white students missed less school and failed fewer courses than African American and Hispanic students. Both white students and Hispanics had higher grade point averages than African American students. When the multivariate analyses controlled for household income and school factors, the only significant finding was that white students failed fewer courses than African American and Hispanic students.

Wagner et al. (1991) found that employment rates of students in the National Longitudinal Transition Study were affected by the socioeconomic status with students from higher socioeconomic status households more likely being employed as well as those in suburban areas (10 percentage points higher than urban youth). As would be expected, the unemployment rate in the community was also directly related to a greater likelihood of being employed.

A multivariate analysis was conducted to determine the impact of various variables for mild and severe disabilities. The general pattern found was that older, non-minority youth were more likely to be employed regardless of the level of disability. The impact of being a member of a minority group resulted in greater unemployment for students with more severe disabilities.

These data indicate the potential influence of community variables on youth with disabilities; however, data are lacking on the exact relationship between these variables and youth with serious emotional disturbances.

Context Moderator Variable Differences Among the Ethnic Groups in the National Longitudinal Transition Study

Moderator variables not only provide information about the impact of other indirect impact but also provide data that demonstrate the need for competencies of school staff and community resources to better serve their students and clients. In addition, parents need training in the same areas so that they can understand the difficulties that they may be exposed to that are in many times out of their immediate control.

The National Longitudinal Transition Study did include ethnic backgrounds in a number of their analyses. Wagner (1995b) conducted several specific analyses on this database to estimate the contribution of poverty and ethnic backgrounds on the rates of representation of minority groups in special education. Those analyses, this study, and the Office of Special Education Programs were, and still are, vitally interested in determining whether youth from minority groups are erroneously placed in special education simply due to their perceived race, ethnic background, or culture -- and, specifically, whether *African American youth* are erroneously placed in special education simply due to their perceived race, ethnic background, or culture. Based on the analyses of the National Longitudinal Transition Study ethnic data and poverty levels, Wagner concluded that ethnicity itself was not the major factor in the differences in the rate of placement in special education among various minority groups. Instead, her analyses suggested that poverty has much more influence on being placed in special education that does ethnicity.

The question becomes Is it racial prejudices or are there other explanations for the differences among individuals classified according to U.S. Census and Office of Civil Rights categories? When the data are grouped according to these categories, it is often found that the socioeconomic data also are different for whites, African Americans, and Hispanics. Consequently, there is a confounding of racial and socioeconomic factors. It is likely that socioeconomic variables do affect outcomes. On the other hand, simply because they may be a contributing factor, it does not invalidate the role that racial prejudices have as contributing factor. It is also possible, and some would say likely, that socioeconomic status is itself an outcome factor that has resulted from the long term application of racial prejudices. Yet, the impact of socioeconomic variables must be examined in detail for their influence as one of multiple factors but not at the expense of eliminating other equally viable interpretations.

According to Wagner (1995b), African American ethnic groups have rates of representation in the categories of mental retardation and serious emotional disturbances that are higher than the rates within the general population. Such placements might be subject to racial biases because of the potentially discretionary nature of staff decisions; yet, African American ethnic groups also have high rates (in comparison to their rate of representation in the general population) in every special education category including visual, speech impairments, and deaf/blind. These latter categories have little staff leeway in making such placements, and consequently, racial prejudices would not seem to be a factor in such placements.

In this same study, Wagner examined the prevalence of disability among ethnic groups across poverty levels. When the incidence of disability within ethnic groups was compared to their rate of representation within three levels of household income, it revealed that rates for African American ethnic youth in special education were similar to the rates of representation within each household income level (See Table 3, page 7). Yet, the rate of placement in special education for Hispanic ethnic groups was still lower than their rates in each of the household income levels. Wagner suggested that differences between the definition of Hispanic ethnic groups in the Current Population Survey and the National Longitudinal Transition Study may contribute to Hispanic representation in special education.

With regard to youth with serious emotional disturbances, Wagner's (1995b) report of data from the Current Population Survey estimate that African American youth represent 37.4 percent of the population within the lowest income category, 16.9 percent among the middle income category, and 10.4 percent among the highest income level. Rates of placement in programs for youth with serious emotional disturbances for African American ethnic groups was 38.5, 20.7.

and 12.7 percent, respectively, by low, middle, and high income groups. For African American youth, the rate of representation with programs for youth with serious emotional disturbances were identical to that within the general population by income levels.

In contrast, Hispanic ethnic representation among the income levels was 16.9, 9.4 , and 2.7 percent in the low, middle, and high income levels in the general population. Youth of Hispanic ethnic backgrounds are placed in school programs for serious emotional disturbances at the rates of 8.5, 4.1, and 3.5 percent, respectively, across the low, middle, and high income level. Hispanic ethnic youth are represented at half the rate in programs for youth with serious emotional disturbances than their rates within the low and middle income levels in the general population.

In Table 6-1, data from the National Longitudinal Transition Study statistical almanac on youth with serious emotional disturbances (Valdes et al., 1990) are summarized for ethnicity and various household and community demographics. The primary reason for summarizing these data is to compare ethnic groups on factors that have been associated with less positive in-school and post-school outcomes. If the ethnic groups can be considered equal on such measures, then differential outcomes may be more directly linked to ethnicity or some other factor than these moderating variables. If the ethnic groups differ on various outcomes, then, it is possible that these differences may be influencing the outcome measures.

About half the African American (58.6%) and Hispanic (49.7%) households in the National Longitudinal Transition Study had parents who did not have a high school diploma; for white ethnic groups, it was 37.3 percent. Over two thirds of African American households (68.9%) had single parents, while it was nearly half for Hispanic, and about a third for white ethnic groups. Though it was expected, it is still important that English was not spoken at home in nearly a quarter of Hispanic households. The majority of African American and Hispanic households had incomes below $12,000, while for white ethnic groups only about a quarter of the households had incomes below $12,000. And, as would be expected based on household income, African American and Hispanic households were more likely (63.3% and 57.6%, respectively) to receive one or more of the eight different state or federal benefits (SSI, SDI, social security survivors benefits, Medicaid, AFDC, Public Assistance, Food Stamps, and other benefits). Finally, the majority of African American (66.2%) and Hispanic (68.2%) families were from urban areas, while less than a third of white ethnic families were from the city. Though white ethnic groups were predominant in suburban areas, African Americans were more likely to be in suburban areas than Hispanics. Hispanic and white ethnic groups were more likely than African American to be in rural areas.

The economics of the ethnic groups were also different. For the Hispanic ethnic group, the unemployment rate appeared higher than the white ethnic groups (8.4% versus 6.7%), while for the African American group it was nearer the white ethnic group at 7.1 percent. Yes, white ethnic groups lived in communities where the lowest salaries were paid for service occupations. These data suggest very strongly that there were considerable differences among ethnic group demographic characteristics.

Differences Among Minority Groups in the General Population

In a separate study funded by the Office of Special Education, the main focus was solely on the potential influence of ethnicity on the rates of disability among different groups. Carlson, Hirshhorn, Ryaboy, and Zhao (1996) analyzed the data from the 1992 Current Population

Table 6-1. Ethnicity, Family Characteristics, and Communities of National Longitudinal Transition Study Sample of Youth with Serious Emotional Disturbances (Valdes, Williamson, and Wagner, 1990)

Area	Categories	Ethnic Group		
		White	African American	Hispanic
Parent Education N=591	No High School Diploma	37.3	58.6	49.7
	High School Diploma	31.4	24.7	26.9
	Some College and/or Degree	31.4	16.6	24.4
Household N=603 and Language N=632	Single Parent	34.7	68.9	49.7
	English spoken at home	99.4	99.7	77.6
Household Income N=552	Less Than $12,000	27.6	59.4	58.3
	$12,000 to 24,999	35.3	26.8	23.8
	$25,000 to 37,999	19.0	10.2	6.1
	$38,000 to 50,000	10.0	1.9	7.9
	More than $50,000	8.1	1.7	4.0
Economic Assistance N=586	Receiving one or more of eight listed benefits	41.5	63.3	57.6
Location of School N=618	Urban	31.2	66.2	68.2
	Suburban	41.1	22.3	7.3
	Rural	27.7	11.5	24.2
Economics of Community N=779	Unemployment Rate	6.7	7.1	8.4
	Average Monthly Salary for service occupations	$1,536	$1,612	$1,603

survey (CPS) and the 1993 National Household Educational Survey (NHES) to assess the prevalence of disability in different racial/ethnic groups. These data bases are different sources of disability estimates from those reviewed in this study, and the main purpose of their study was to determine why black and Hispanic families report **higher** rates of disability on the CPS than do whites, while Hispanic families report **lower** rates of disabilities on the NHES than whites or blacks. They found that the various demographic and socioeconomic status variables of youth from families who are white were more likely to result in a greater incidence of disability among the children of these families. Such a relationship was not found for those from black and Hispanic families. The authors contribute the lack of relationships for minority groups as stemming from the small sample sizes. Their data did support previous finding that children from black and Hispanic families are more likely to live in households with low income. They were, however, unable to determine why the rates differed between the two national surveys. The differences in economic and educational status for different minority groups are also reported for the working age (16-64) population with and without disabilities (Walker, Asbury, Rodriguez, & Saravanabhavan, 1995). These authors conducted a more in-depth examination of the initial findings from Case Services Report (RSA 911) of the General Accounting Office that more case dollars were spent on white ethnic groups than on minorities. As part of that report, economic data, educational data, and other information on ethnic groups were reviewed.

First, it is important to note that the incidence of disability in various adult ethnic groups is similar to that reported in this study for different ethnic youth. In the Walker et al., 1995 study, the 1990 census data indicated that 76.3 percent of the population is white, 11.5 percent of the population is African American, 8.6 percent is Hispanic American, 2.8 percent is Asian American, and 0.75 percent is American Indian. Disability estimates indicated that 18.7 percent of the working age adults are African Americans, 7.5 percent are Hispanic Americans, and 1.3 percent are Asian Americans.

As was true for special education, African American adults have a higher rate of disability than their representation in the general population; Hispanic American adults have a rate close to their rate of representation; and Asian American adults have a rate lower than the rate in the general population. Even though there are significant differences in disability assessment and classification processes between an entitlement program like special education and an eligibility program like vocational rehabilitation, the same pattern of prevalence rates is found for adults as for youth with disabilities. The most important difference is that individuals must prove their eligibility for services. In this situation, it would be expected that prejudices against an ethnic group would be reflected in lower rates of acceptance for vocational rehabilitation services. Yet, African American ethnic groups were again represented at a higher rate than in the general population. This study did however find that less money is spent on African American ethnic group members than on white ethnic group members accepted for vocational rehabilitation services.

Second, the economic and educational attainment of adult non-disabled minority groups also presents a pattern similar to the data of the National Longitudinal Transition Study. In 1987 for example, African American adults who worked at any time during the year had a lower mean annual income than white ethnic adults ($14,244 versus $19,482), had a higher unemployment rate in March of 1988 than whites (e.g., 13.2 percent for African American males versus 6.2 percent for all males), and 22.6 percent of African American adults had completed 12 years or less of schooling versus 15.7 percent in the general population.

Hispanic Americans had similar statistics with earning of $14,400, an employment rate of 9 percent for males, and the highest rate (about 44%) of completing less than 12 years of schooling. Asian American's rate of completion of four years or more of college was almost twice that of whites (39% versus 22%), and the annual full-time earning was only somewhat lower than whites ($26,760 versus $28,880).

Also it is important to note that American Indian ethnic adult groups fared poorest of all the ethnic groups in a number of factors. They had the highest rate of disability with 21.9% of the American Indian population having a disability (McNeil, 1993) and had higher rates than the general population of mortality, suicide, alcohol abuse, mental health problems, diabetes, heart disease, cancer, cirrhosis, and visual impairments (O'Connel, 1987; Hodgekinson, 1992; Indian Health Service, 1990; Saravanabhavan, Martin, & Saravanabhavan, 1994).

Exemplary Models

The integration of multiple systems is often difficult, and this is certainly the case for systems serving youth with serious emotional disturbances. While there is often agreement on the need to achieve integrated services, the results often focus more on administrative agreement rather than on a system of care. The initial beginnings are often frustrating and the results take time.

Duchnowski, Kutash, and Knitzer (in press) review the principles, characteristics, and mechanisms for designing Community Integrated Services. Perhaps of most importance is the focus on mechanisms suggested by Adelman (1993) to effect changes in the school: (a) governance and planning, (b) initiation of desired change, and (c) maintenance and enhancement of change. This simple change strategy recognizes that those in charge of governance and planning must provide the policies for change and must see the change has specific directions and must be able to be measured. It seems that the perfect model has yet to be designed for youth with serious emotional disturbances.

There are a number of other models based on this change principle that have been proposed to resolve the dismal outcome for these youth. Table 6-2 lists three major types of model programs: Prevention models based on *early intervention*, models focused on *accessing and integrating the Children and Adolescent System Program with school based programs (from the community inward)*, and models designed to *redesign communities and their resources*.

These models show the range of efforts that have been initiated to address the problems of youth with serious emotional disturbances, youth at risk, school restructuring, and community involvement. The data from these programs in many cases have yet to be published, and there has not yet been developed a methodology to compare such model programs when they appear to have multiple goals and outcomes. Positive data in one outcome area are often used to advocate for the model even if other areas showed little or no change. Since the capacity of this study is limited, these model programs are presented as examples of different on-going efforts. A formal evaluation of the success and/or failure of these programs would be a priority for future research.

Table 6-2. Examples of Model Programs Involving Youth With Serious Emotional Disturbances, Schools, and Communities

Early Intervention Focused Programs	Location	Reference
Perry Preschool Project	Ypsilanti, MI	Zigler, Taussig, & Black, 1992
Syracuse University Family Development Research Program	Syracuse, NY	Zigler, Taussig, & Black, 1992
Yale Child Welfare Research Program	Connecticut	Zigler, Taussig, & Black, 1992
Houston Parent-Child Development Center	Houston, TX	Zigler, Taussig, & Black, 1992

University of Rochester Nurse Home-Visitation Program	Rochester, NY	Zigler, Taussig, & Black, 1992
Gutelius Child Health Supervision Study	Washington, DC	Zigler, Taussig, & Black, 1992

Models Integrating Schools with Children and Adolescent System Mental Health Components	**Location**	**Reference**
Alaska Youth Initiative	Juneau, AK	Carter, 1994
Bertha Abess Children's Center Comprehensive Day Treatment Program	Miami, FL	Carter, 1994
Cities in Schools - Seattle	Seattle, WA	Carter, 1994
Classroom Companions	Coeur D'Alene, ID	Carter, 1994
Community Outreach Program for Education (COPE)	Durham, NC	Carter, 1994
A Comprehensive Community-Based Continuum of Care in Butte and Ventura Counties	Arcata, CA	Carter, 1994
Connections Initiative under the Positive Education Program	Cleveland, OH	Carter, 1994
Facilitating Integrated Interagency Services for Seriously Emotionally Disturbed Children in Nashua, NH	Boston, MA	Carter, 1994
Family Mosaic Project	San Francisco, CA	Carter, 1994
Georgia Psychoeducational Network	Atlanta, GA	Carter, 1994
Iowa City Collaborative Integration Project	Iowa City, IA	Carter, 1994
Kaleidoscope	Chicago, IL	Carter, 1994
Kentucky Bluegrass Impact	Frankfort, KY	Carter, 1994
Linn County Youth Service Teams	Albany, OR	Carter, 1994
Partners Project	Salem, OR	Carter, 1994
Primary Mental Health Project	Rochester, NY	Carter, 1994
Project Connect	Bloomington, IN	Carter, 1994
Project Wrap	LaGrange, IL	Carter, 1994
Regional Intervention Program	Nashville, TN	Carter, 1994
SEDNET (Multiagency Service Network for Students with Severe Emotional Disturbance)	Tallahassee, FL	Carter, 1994
Southern Westchester IDT (Intensive Day Treatment) Program	North White Plains, NY	Carter, 1994
Stark County System of Care	Canton, OH	Carter, 1994

Ventura County Mental Health Children and Adolescent Project	Ventura, CA	Carter, 1994
Vermont New Directions	Waterbury, VT	Carter, 1994
Community Restructuring Programs	**Location**	**Reference**
Los Angeles County Schools	Los Angeles, CA	Adelman, in press
Walbridge Caring Communities	St. Louis, MO	Melaville, Blank, & Asayesh, 1993
Lafayette Courts Family Development Center	Baltimore, MD	Melaville, Blank, & Asayesh, 1993
New Beginnings	San Diego, CA	Melaville, Blank, & Asayesh, 1993
Youth Futures Authority	Savannah-Chatham County, GA	Melaville, Blank, & Asayesh, 1993

Benchmarks Targeted by the National Agenda for Youth With Serious Emotional Disturbances

In an effort to continue the discussion brought up by the Peacock Hill Working Group (1991), a coalition of efforts led to the development of a National Agenda to improve results for children and youth with serious emotional disturbances (Osher & Hanley, 1995). The Agenda advocates the following points:

1. Expand Positive Learning Opportunities and Results. To foster the provision of engaging, useful, and positive learning opportunities. These opportunities should be result-driven and should acknowledge as well as respond to the experiences and needs of children and youth with serious emotional disturbance.

2. Strengthen School and Community Capacity. To foster initiatives that strengthen the capacity of schools and communities to serve students with serious emotional disturbance in the least restrictive and most appropriate environments.

3. Value and Address Diversity. To encourage culturally competent and linguistically appropriate exchanges and collaborations among families, professionals, students, and communities. These collaborations should foster equitable outcomes for all students and result in the identification and provision of services that are responsive to issues of race, culture, gender, social, and economic status.

4. Collaborate With Families. To foster collaborations that fully include family members on the team of service providers that implements family-focused services to improve educational outcomes. Services should be open, helpful, culturally competent, accessible to families, and school- as well as community-based.

5. Promote Appropriate Assessment. To promote practices ensuring that assessment is integral to the identification, design, and delivery of services for children and youth with SED. These practices should be culturally appropriate, ethical, and functional.

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6. Provide Ongoing Skill Development and Support. To foster the enhancement of knowledge, understanding, and sensitivity among all who work with children and youth with and at risk of developing serious emotional disturbance. Support and development should be ongoing and aim at strengthening the capacity of families, teachers, service providers, and other stakeholders to collaborate, persevere, and improve outcomes for children and youth with SED.

7. Create Comprehensive and Collaborative Systems. To promote systems change resulting in the development of coherent services built around the individual needs of children and youth with and at risk of developing serious emotional disturbance. These services should be family-centered, community-based, and appropriately funded.

These areas and the goals of the different model projects may provide the direction for an evaluation of outcomes and the principles, programs, and techniques that are effective for youth with serious emotional disturbances.

Chapter 7

Discussion, Conclusions, and Recommendations

Of the 500 articles identified in the search process, more than 250 were reviewed for inclusion in this synthesis of the literature. The purpose of this research study was to identify processes for minority youth with serious emotional disturbances that would prove more successful than others based on in-school and post-school outcome data. The specific findings from that body of research have been presented in the tables and text in the previous chapters. The purpose of this chapter is to discuss the potential implications of these findings and to address their scientific value and limitations, while also recognizing the controversial nature of the topic of special education and minority populations.

Methodological Concerns

Meta-Analysis

While the basic five stages of Cooper's (1989) integrative review was followed, statistical analyses of meta-analysis were not applied because an insufficient number of studies were available that met the required rigor for such an analysis. The statistical analysis not only required several data points to calculate effect size but also required assuming that subject demographic variables, instrumentation, and methods were compatible enough for averaging effect sizes across studies. This assumption was not plausible primarily due to the few studies and the following limitations.

The first limitation was that few of the studies applied inferential statistics. Secondly, when there were two or more studies, critical comparison of the measures, methods, and analyses indicated that combining such measures was not feasible. Lastly, the lack of control by these studies over potential alternate explanations for outcomes and/or the lack of information on the implementation of the processes, the school climate, and demographics of the students and community presented threats to the validity of the data and rendered much of the data unusable for the proposed statistical approach to meta-analysis. Performing a statistical meta-analysis could have lent credibility to data that should be kept distinct because of the varied nature about the research assumptions and quality of the methodology in relationship to this study's goals.

Much of the first part of the research was involved in discovering that the meta-analysis design would not work. Meta-analysis is much more suited to resolving more direct comparison of one method to another method in a very simple dichotomy. For example, is homework more effective than no homework? The conceptual model developed for this study, however, addressed a number of issues that would potentially affect the outcomes of youth with serious emotional disturbances and specifically minority youth within these programs. The complexity of the model was not matched by available data, resulting in a lack of empirical answers to the questions that were posed regarding this population.

On-line Electronic Searches

The study search process proved also to be difficult. The initial strategy was to rely on electronic search strategy utilizing key words developed for this study. The initial search resulted in approximately 100 articles, but their representativeness of the issues was judged as inadequate. Electronic searches appear to have

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some inherent limitations at the present time. First, the coverage was not as comprehensive as expected since not all the journals and documents of the field of behavioral disorders were represented in the data bases. Secondly, the various electronic searches limited the years covered in the data bases and periodically added and removed documents. Often, the user was unaware that the data base had changed or that the breadth was limited to a certain time period. Search of documents for key words was limited by the rules for exact matches (e.g., plural forms and the extent of an exact match of upper and lowercase characters varied). Finally, the abstracting of articles further limited searching by key words. Writing abstracts was often cursorily done, and many points of the article would not be included for obtaining a match; or the key word would match, but the article had little or nothing about the area.

The result of the initial electronic search was that a number of articles that were known to the committee were missed. The decision was made to rely more heavily on the traditional review of references in one article, then reviewing the citations in each referenced article, etc. The advisory council members and colleagues also provided valuable reference lists to examine. This search strategy resulted in more than 400 additional references directly related to the field more quickly than the electronic search.

With the current state of the art of electronic data bases, it is recommended that they be used only for initial searches to develop a body of references that would serve to search for relevant documents for inclusion. Electronic searches cannot substitute for a knowledge of the field to be studied. Basic reviews even though not data based proved valuable for locating other documents. Other bibliographies on the field, regardless of their purpose (classes materials, single topical reviews, and annotated bibliographies) were also very helpful in locating potential documents.

Adoption of an Alternative Methodology

Given that the data were not appropriate for more sophisticated application of complex meta-analysis, there was a need to synthesize the data available to date utilizing a more descriptive approach. For most areas, there was descriptive data that documented the degree of the problem. The purpose of this review was to provide a broad, yet detailed, picture of the youth with serious emotional disturbances in relationship to data related to the factors of the conceptual model given in Figure 1 of Chapter 1, address the issue of minority youth and potential explanations for differential outcomes, examine emerging models, and suggest areas that need further research.

Prevalence Rates

In the 1992-93 school year, 414,279 youth ages 6-21 were reported placed in programs for serious emotional disturbances across the nation. This represents about 8.7 percent of the total student population served in special education programs under the Individuals with Disabilities Education Act and less than one percent of the total student population in the school systems.

Studies on the emotional problems of children and adolescents (Brandenburg et al., 1990; Knitzer et al., 1990a) indicate that the prevalence of psychiatric disorders in this population is much higher (6-20%) than the less than one percent identified by secondary school as youth with serious emotional disturbances (Annual State Child Count data, U.S. Department of Education, 1995). The incidence of psychiatric disorders is more likely to be estimated from reports of need for services or having had an emotional problem in the last three months to a year rather than the count of student-age youth receiving psychiatric services at any given time. For example, Survey of Income and Program Participation ask whether there has ever been a problem rather than a current problem. In contrast, state data provided annually to the Office of Special Education are the actual numbers of students with serious emotional disturbances being served by schools in special education in any given year.

Unmet Needs for Youth With Mental Health Problems

It has been suggested (e.g., Knitzer et al., 1990a) that the differences between the number of youth in need of mental health services and the number of youth in school-based programs for youth with serious emotional disturbances represents the extent of the unmet need of these youth for mental health services. Though it is clear that both the incidence of mental illness and youth placed in special education are addressing a similar problem area, these rates are not similar prevalence rates because they are based on different definitions. That is, one appears to be an estimate of having a mental health problem (at some point in time of varied duration), and the other is the national rate of placement in a specific program for youth with serious emotional disturbances. Some have suggested that the difference between these rates shows an unmet need. It does not appear that the two rates measure the same thing. *If* every youth who had an emotional problem also required placement in a school-based program, *then* the difference between the prevalence rate for mental health and state data on school placement may be an appropriate measure of unmet need. More valid comparison data are needed by obtaining data on the extent to which youth who have an emotional problem have access to appropriate psychiatric services and the extent to which youth who need a school-based program are placed in programs for youth with serious emotional disturbances in their school.

Wenger, Kaye, and LaPlante (1996) do provide data on the unmet need for special education for all children age 5-17. Their estimate of the unmet need for special education is 0.5 percent ("Needs but does not receive special education"). This study reinforces the point that the difference in prevalence rates should not be interpreted as suggesting that schools are serving less than one percent of the population of youth with serious emotional disturbances. Most students (99.5%) who need special education services appear to be receiving those services.

In contrast, other data suggest that the rate of placement of youth in school programs for serious emotional disturbances is not the same as the incidence rate for emotional problems. For example, when teachers were asked whether students have a severe behavioral problem, Kelly, Bullock, and Dykes (1977) found that the estimate of prevalence was estimated at 2.2 percent. On the other hand, those same teachers thought that nearly 20 percent of the students might be behaviorally disordered. It is clear that there may be a significant number of youth with psychiatric problems in general education classes who may need counseling or other mental health services but do not need to be placed in a special education program for serious emotional disturbances (Knitzer et al., 1990a).

The extent to which the mental health system has an unmet need cannot be determined from the data in this study since data on program capacity of the mental health system were not reviewed. What is not clear from the current data is the extent to which those youth who are in programs for serious emotional disturbances who need psychiatric services are receiving such services. That measure of unmet need must be based on data about mental health program capacity to serve youth with serious emotional disturbances in comparison to those youth and their families' need for such services.

The data reviewed for this study do not allow such comparisons. The difference between the prevalence rate for placement in special education programs for youth with serious emotional disturbances and the estimated rate of the past and/or present existence of an emotional problem is not the best measure of the unmet need for psychiatric services or for special education services for this population.

Age of Onset and Gender

Parents report the age of onset earlier than do the schools' placement in a program for youth with serious emotional disturbances. More than 60 percent of the parents (Wagner et al., 1991) have indicated that the symptoms of an emotional problem had been observed by the time the child was eight years old. Yet by age 11, only 35 percent of the youth are identified for placement in the program (U.S. Department of Education, 1994). For the schools, about 60 percent of the serious emotional disturbance placements occur in the age group of 12-17, while less than 40 percent of parents report the onset of the problem at ages greater than 9 years old. These data indicate as would be expected that parents are the first to know that their child has an emotional problem and suggest the need for greater input from the parent at younger ages of the child.

Both the parental report of onset of problems and the school acceptance into a program for youth with serious emotional disturbances occur at an older age for these youth than for other youth with disabilities. Other disabilities are more likely to be reported under the age of one, while youth with serious emotional disturbances are more often identified later between the ages of 12-21. This finding is not surprising since many of the other disabilities are readily identifiable and many of the symptoms of serious emotional disturbances are not considered problematic until later in adolescent years.

While the youth in many special education categories are more likely to be males, the percentage of males (80%) is particularly striking for youth with serious emotional disturbances. Wagner et al. (1991) reported on page 2-20 that males have significantly lower IQs overall, 74 vs 82, and are lower on their scale of functional mental skills, 13.4 vs 14.0 than females. It may be that males' more aggressive behavior and lower academic skills contribute to their increased rate of placement in programs for youth with serious emotional disturbances.

Sources of Prevalence Rates: Differences Between National Data and State Data

When it comes to estimating the prevalence of the number of youth with serious emotional disturbance in school programs, the main source is the Annual State Child Counts submitted to the Department of Education. The data from these child counts are given in the appendices to the annual reports to Congress on the implementation of Individuals with Disabilities Education Act. While these data are the only national counts, the series of articles by Oswald and Coutinho raises questions about the validity of the data based on the lack of consistency among states in reporting basic data about youth with serious emotional disturbances.

These annual reports to Congress (e..g., Sixteenth, 1994; Seventeenth, 1995) on the Implementation of Individuals with Disabilities Education Act show large state variation on the number of youth with serious emotional disturbances, placement in various settings, and the mode exiting by graduation and dropping out. These variations are significantly large enough to raise alarm over the accuracy of national data: (a) Average combined graduation rate (diploma and certificate) was about 35 percent in 1991-92, yet Massachusetts graduated 71 percent of its students with a diploma and the state of Washington had a combined rate of only about 10 percent; (b) the known drop-out rate also averaged 35 percent across states, yet Montana reported that 75 percent dropped out; and (c) the average rate of claiming unknown status was 29 percent while Oregon, California, Minnesota, and Pennsylvania reported that the status of 80, 74, 71, and 62 percent, respectively, was unknown.

What is of particular concern in this variation in state data is the extent to which the educational needs of youth with emotional and behavioral problems are being met. For example, in low incidence states, are there numbers of youth with serious emotional disturbances who are not being served? Or are the high incidence states unnecessarily placing youth in programs for serious emotional disturbances?

Research like Oswald and Coutinho (1995) is important in that it highlights the problems with the data and attempts to answer some of these questions. Their data did show evidence of fiscal capacity of the school district and white ethnic groups composition as moderating variables that may influence certain rates. Unfortunately, these analyses are at the macro level and could not examine specific school programs or practices. Such data suggest a need for changing the state reporting system to one that could provide more consistent and meaningful information that can be used for program improvement.

Definition of Serious Emotional Disturbances

A major concern within programs for youth with serious emotional disturbances is that of whether conduct disorders should be included under the category of serious emotional disturbances or under another category. Smith, Wood, and Grimes (1988) and Wood, Cheney, Cline, Sampson, Smith, and Guetzloe (1991) review a number of issues about including conduct disorders and the rationale for using the behavioral disorders label rather than serious emotional disturbances. Much of the debate has been about educational placement from the continuum of mainstreaming to separate facilities (Kauffman, Lloyd, Hallahan, & Astuto, 1995).

From a program perspective, the classification of youth with serious emotional disturbances places a variety of potential emotional problems in a single program when there would seem to be a need to provide different strategies based on the behavior. For example, compare the strategies needed for withdrawn behaviors (depression) as opposed to those who are aggressive and combative, behavioral problems versus significant emotional problems, and so forth.

The continuing debate on the classification of youth with serious emotional disturbances indicates an inability of professionals and policy makers to reach a consensus about the direction of programs for youth with serious emotional disturbances. The debate over classification has been going on since Bowers' 1982 article with no resolution. Nor is there any data that suggest that changes in the definition of serious emotional disturbances would have an impact on either pre- or post-school outcomes. The recent emphasis by the National Agenda (Osher & Hanley, 1995) to provide common ground is a beginning toward reaching some consensus.

It is not clear whether the variation among states may be due to (a) their formal and informal definition of serious emotional disturbance, (b) whether some states are more effective than others, (c) using different criteria for reporting data, or (d) having different policies that affect reporting statistics. The data from this study are based on the annual counts and are subject to the variety of concerns about the validity of the classification of youth as serious emotionally disturbed.

In-School and Post-School Outcomes

Another objective of this project was to utilize outcome data to determine whether one or more of the various processes might be more effective than others.

School Performance and Participation

The National Longitudinal Transition Study data suggest that youth with serious emotional disturbances have an IQ level (86 full scale) that is greater than the average of all youth with a disability, but this average is in the dull normal range according to the Wechsler norms and low average on the Stanford Binet. On achievement tests, these youth tend to be about two grades behind in reading and three grades behind in math. Their grade point average is slightly above a C (2.2 on a four-point scale). They fail more courses than other students with disabilities, have twice the rate of grade retention, and miss slightly more days per year than other youth with any disability.

While in school, they have double the rate of arrest for all youth with disabilities and non-disabled youth in the general population with similar demographic characteristics, tend to be more socially isolated, and join fewer formal groups. On the other hand, they tend to be employed more often while in school than other youth with disabilities.

Least Restrictive Environment

Data on placement contained in the annual reports to Congress on the Implementation of Individuals with Disabilities Education Act (e.g., Department of Education, 1994, 1995) indicate that youth with serious emotional disturbances are more likely to be educated in a separate facility than are students with specific learning disabilities, speech and hearing impairment, or mental retardation. When they are in the local school district, they are twice as likely to be in a separate class or resource room than in the regular classroom.

There are more positive reports from two related studies that examined the movement of students from restrictive environment. For example, Stephens and Lakin (1995) found that most youth with serious emotional disturbances return to the school from separate facilities even though the percentage of unknown status is higher than other youth with disabilities exiting these separate facilities. Denny, Gunter, Shores, & Campbell (1995) sequential analysis of placement options found that there is much more movement between resource rooms and separate classrooms for these youth than would have been expected based on the national averages. These studies suggest that youth who do go to separate facilities do return and that the in-school placement settings may involve more movement among different placement settings rather than a single placement while in the secondary school.

Exiting High School

The mode of exiting for youth with serious emotional disturbances highlights the difficulty that these youth have in high school. The average national drop-out rate of youth with serious emotional disturbances is about 35 percent based on state data reported to the Office of Special Education (Department of Education, 1994). This estimate may be misleading when compared to the data from the National Longitudinal Transition Study (Valdes et al., 1990), which indicated that is closer to half of the youth with serious emotional disturbances.

States reporting data to the Department of Education may also use the category of "unknown." Though the average rate of "unknown" according to state reports is 30 percent, those states that used very high rates (e.g., 60-80%) also have very low rates of dropping out (about 10-20%). Therefore it is likely that some of these students have dropped out. Based on estimates from the National Longitudinal Transition Study, it is likely that about half the 30 percent whose status is unknown have dropped out. The national drop-out rate average could be somewhere between 50 percent and perhaps as high as 65 percent.

While the state data range from a low of about 10 percent to a high around 60 percent, local school districts are likely to be even more variable. For example, several schools in the state of Minnesota (Bruininks et al., 1988) reported a rate of nearly three quarters of the students dropping out, and a large school district in the Northwest has a rate of 80 percent of the youth with serious emotional disturbances dropping out of school (Kortering & Blackorby, 1992).

Of all the data on youth with serious emotional disturbances in school, the high rate of dropping out should be a major concern to teachers, parents, and administrators. Wagner (1991) found that a number of factors that are under the control of the school system affect the rate of dropping out. The pattern is fairly clear. The more students miss school, the more likely they are to fail a course. The more a student fails courses, the more likely it is that a student will drop out. Taking more vocational courses and having more academic supports are associated with less likelihood of dropping out. And the National Longitudinal Transition Study, like other studies, found that the reason students drop out is primarily due to the fact that they are not doing well in school and/or they do not like school. Whether the school's responsibility is to educate students or to prepare the student for employment, neither goal can be accomplished if the student is not in school.

Post-Secondary Success: Employment, Education, Social Engagement, and Arrests

Several different measures were used to assess the degree of success of youth with serious emotional disturbances after exiting high school. The major ones are fairly obvious in terms of employment and attending any post-secondary education or training. It was more difficult to assess social engagement or community adjustment. On the other hand, it was also easy to determine if the student was arrested. These measures do not paint a bright future for youth with serious emotional disturbances after exiting school.

Less than half (44.5%-48.2%) of the youth with serious emotional disturbances were employed (Frank et al., 1991; Wagner et al., 1991), which is a low rate given the fairly high level of self-care and cognitive abilities of these youth. About 8 to 18 percent of these youth attended any post-secondary training (Frank et al., 1991; Neel et al., 1988; Wagner et al., 1991). Their arrest rate was about 35 percent in the initial years after high school. While both Neel et al. (1988) and Wagner et al. (1991) attempted to measure social engagement, both of these measures simply combined the number of youth employed and those attending post-secondary education. The concept as utilized in these studies does not appear to increase understanding of these youth especially when it ignores arrest rates and other measures of social engagement (e.g., marriage, living independently, income level, etc.).

The data also indicate that the situation of these youth worsens over time. Their employment rate remains less than 50 percent for these youth even after being out of school for two to four years and is lower than the rate of employment for youth with mental retardation (Wisconsin Department of Public Instruction, 1993). At the same time, the arrest rate increases to nearly 60 percent for these youth three to five years after exiting.

The overwhelming majority of youth with serious emotional disturbances are male, but it would seem encouraging that two studies (Frank et al., 1991; Wagner et al., 1991) report that the employment rate for males is more than 20 percentage points higher than for females (approximately 53% vs 30%). The gain for males, however, is not that great since their employment rate is still only about 50 percent. It raises significant concern for youth with serious emotional disturbances who are females if their rate of employment is only 30 percent. The National Longitudinal Transition Study (Wagner et al., 1991) found that the rate of marriage was less than 10 percent for all youth with disabilities. Wagner (1995) reports that the rate of marriage or living with someone for all youth with serious emotional disturbances rises to only 17 percent three to five years after exiting high school; yet, during this same time period nearly 50 percent of the females with serious emotional disturbances have become mothers.

The Processes

The processes that were expected to be described in the study's methodology were those listed in Table 1-1 in Chapter 1, which lists a number of strategies and techniques that could be used for youth with serious emotional disturbances. Two meta-analyses (Carlberg & Kavale, 1980; Skiba & Casey, 1985) provided data on the effect of programs for youth with serious emotional disturbances but did not examine any specific techniques. Both of these reviews asked whether programs for youth with serious emotional disturbances are more effective than general education. And, in both cases, the answer was positive.

The question is What outcomes are these programs positively influencing? For Carlberg & Kavale (1980), there were no differences across various outcomes (achievement, social/personality, and others), while Skiba and Casey (1985) concluded that classroom behavior was most effectively improved. Skiba and Casey (1985) also found that behavioral treatments and behavioral orientation to treatment were effective, but then most of the studies (about 70%) were based on behavioral treatments.

Though both of these meta-analyses have cautions to be observed because of the small number of studies, it does appear that behavioral techniques are the best at controlling classroom behavior. There is also evidence that social skill training is effective at reducing antisocial behavior in young children (Zigler et al., 1992). All of these studies concentrate on the immediate control over behavior, and no data are available on the relationship between outcome measures such as dropping out, arrest, employment, and satisfactory community adjustment. It is also a question of what behavior should be controlled, the fidelity in implementing these techniques, and how to ensure maintenance of the behavior change and generalization to other aspects of the student's life outside the classroom and school.

Cultural Competencies and Racism in Assessment and Placement

In terms of assessment and placement, one of the major concerns in the literature was that of cultural biases in this system. There are two aspects of cultural biases. The one is a technical concern about cultural competencies because test and assessment procedures are constructed without an adequate understanding of cultural differences and their impact on judging the "correctness" of a response or behavior. The other aspect is more attitudinal because prejudice against ethnic backgrounds results in unequal decisions in interpreting tests and deciding placement options. Both of these types of influence could affect the falsely identifying and placing youth of nonwhite ethnic background in programs for youth with serious emotional disturbances.

Early research suggested more referrals to special education when the cultural background of the student and teacher were different (e.g., Zucker & Prieto, 1977). It was suggested that teachers interpret the behaviors of minority groups differently and this prejudice led to more referrals. Later research (Bahr et al., 1991) suggested that behaviors did not lead to more referrals, but it was differences in academic performance that led to greater referrals. Overall, the data were lacking to draw firm conclusions about the influence of cultural competency and prejudices within the identification, assessment, classification, and placement processes and their relation to in-school and post-school outcomes.

Influence of Moderator Variables

The last hypothesis dealt with the influence of moderator variables. Other than the prevalence rate for minority groups, there was little data to link moderator variables to the effectiveness of programs for youth with serious emotional disturbances. The review relied upon data from the National Longitudinal Transition Study and background information.

Influence of Ethnic Groups

It is important to note that the outcomes for all youth with serious emotional disturbances are poor. Since white ethnic groups make up about 70 percent of these youth, the data above are more reflective of white ethnic youth than other ethnic groups. The ethnic backgrounds of youth with serious emotional disturbances are detailed in most of the individual studies. The two major exceptions are the National Longitudinal Transition Study (and its several reports) and periodical reports from the Office of Civil Rights Surveys within the Department of Education. The annual reports to Congress on the implementation of Individuals with Disabilities Education Act provide data on American Indian ethnic groups who are served through the Bureau of Indian Affairs.

The source for most of the following outcome data is from the National Longitudinal Transition Study that compared white ethnic groups to African American ethnic groups and Hispanic ethnic groups. The number of Asian and Native American youth with serious emotional disturbances was insufficient in the National Longitudinal Transition Study to be valid. The following is a summary of ethnic group differences by category (Tables refer to this study):

Achievement Levels (Table 5-1)

Hispanic groups scored lowest on achievement tests, white groups the highest and African American groups scored close to white groups.

Grade Point Averages and Course Failures (Table 5-1)

African American ethnic groups had the lowest GPA and had the highest number of course failures with Hispanic and white ethnic groups about equal.

Attendance (Table 5-1)

African American students missed the most days with Hispanic and white students about equal.

Time in General Education Classes

For all youth with disabilities, white ethnic groups spend more time in general education classes than both African American and Hispanic groups (Wagner et al., 1991, Table 3-15, p. 3-30).

Group Membership and Social Isolation in School (Table 5-2)

Hispanic youth are low in group membership and high in school social isolation. African Americans tend to be high in group membership and low in school social isolation with white groups near African Americans or between this group and the lower rates for Hispanic groups.

Arrest Rates in High School

There were no differences in arrest rates for youth with serious emotional disturbances as a function of ethnic group membership at the time of initial data collection in 1987, which included youth who were in school and out of school (Valdes et al., 1990,

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Table 41b, p. 160).

Arrest Rates Out of High School

For all youth with a disability, African American groups were more likely to be arrested than white or Hispanic groups. (Wagner et al., 1992, pp. 6-32 to 6-36).

Exiting High School (Table 5-4)

Fewer African American and Native American youth with serious emotional disturbances graduate and more drop out than white ethnic groups. Data on Hispanic youth with serious emotional disturbances were not reported.

Employment Rates (Table 5-5)

African American youth with disabilities are employed immediately after school at half the rate of white and Hispanic ethnic groups, which are about equal. After 3-5 years, employment for African American youth increased to the level for Hispanic youth which stayed the same, while the employment rate for white youth increased. For youth with serious emotional disturbances, both African American and Hispanic ethnic groups are employed at a lower rate than white ethnic groups (Valdes et al., 1990).

Post-Secondary Education (Table 5-6)

No differences were found between African American and white ethnic groups (about 13%.) and no data were reported on the post-secondary education of Hispanic ethnic groups.

Demographic Differences Among Ethnic Groups

When differences are found among groups (such as ethnic categories), it is important to be certain that these groups did not differ on some other characteristics that could account for the differences in the outcome measures. The data presented in the National Longitudinal Transition Study and summarized in Table 5-2 show that the ethnic groups differed on a number of variables that may explain the differences in outcomes between the groups. On most variables (household income, parent education, single parents, etc.) both African American and Hispanic ethnic groups were higher on variables that are associated with poorer outcomes. Consequently, it is not possible from the data to determine what the impact of ethnicity is independent of these educational attainment and economic factors.

African American youth with serious emotional disturbances, as a whole, miss more school, fail more courses, and have a lower grade point average than white ethnic groups. Such factors affect dropping out of high school, which later affects employment and participation in post-secondary education.

Family Participation

Family participation in the school life of students has consistently shown to result in better outcomes for youth in general and for youth with disabilities (Epstein, 1985; Wagner et al., 1991; Young, 1993). The studies reviewed did not contain data on the effectiveness of these techniques for youth with serious emotional disturbances. The concept of family involvement has its own logical appeal but has drawn little attention by researchers examining youth with serious emotional disturbances in the school setting.

Community Linkages

There has been an increasing number of studies reported on community linkages with mental health programs. While the studies primarily focus on the impact of Children and Adolescent System Programs on the attainment of treatment goals, they are also concerned with the transfer of such treatment goals to the school environment and coordination between the school and mental health systems (Knitzer, Steinberg, & Fleisch, 1991). These studies do not compare in-school and post-school success, and instead attempt to demonstrate the efficacy on changing specific behaviors (Burchard & Clarke, 1990), community placements (Duchnowski, Johnson, Hall, Kutash, & Friedman, 1993), and costs of mental health programs (Epstein et al., 1993). The lack of focus on these outcome measures may be attributed to the relatively recent implementation of school and community mental health linkages and the lack of appropriate methodology to demonstrate their effectiveness. Another potential interpretation is that the linkages between schools and these programs are not effective and need significant restructuring.

School Characteristics

It was also assumed that data would be found about the interaction of outcome measures and school characteristics such as policies, approaches, and inclusion of youth with serious emotional disturbances. Data on school policies and practices specific to programs for youth with serious emotional disturbances were lacking. It was hypothesized that the school atmosphere (discipline, safety, teacher preparation, and leadership of the administration) would be important variables. Oswald and Coutinho (1995), Coutinho and Oswald (1996), and Oswald and Coutinho (1996) found that per capita income and per pupil expenditures were associated with differential outcomes in identification, placement, and graduation rates. Most of these data suggested that more affluent schools had better outcomes except for higher per pupil expenditures associated with greater numbers of placement in separate facilities. Presumably, it was because the schools with more money were willing to pay the price to send their youth with serious emotional disturbances to private facilities. No other studies were found on school characteristics and outcomes for youth with serious emotional disturbances.

Community Demographics

Only one data source was found on the effectiveness of community demographics such as socioeconomic status and other variables in relation to youth with disabilities and youth with serious emotional disturbances (e.g., Wagner et al., 1991). Lower socioeconomic status, more single parent households, and lower parent education are associated with poorer post-school success. While ethnicity and urban location were important factors in various other analyses, in the Wagner et al. (1991) study these variables were also correlated with other factors such as socioeconomic status.

Conclusions

The conceptual model given in Figure 1 of Chapter 1 was developed through the input of the Constituent Advisory Committee and preliminary review of the literature. A meta-analysis was attempted on data from studies on outcomes for minority youth with serious emotional disturbances to examine the efficacy of different processes and the influence of various moderating variables within the school and community. Of particular concern was the potential influence of cultural competency of minority populations and biases due to racial prejudices. It was expected that the analysis would provide empirical answers to questions posed by the committee, estimates of the effectiveness of different techniques, and estimates of the validity associated with various explanations.

The search for outcome data produced few studies that reported the targeted in-school and post-school outcomes. Only one study provided data across the various factors, and less than 20 studies provided data on one or more aspects of the targeted outcomes. In view of the differences in methodology and the few number of data points for estimating the size of effect, the statistical meta-analysis was abandoned. A descriptive synthesis of the existing data was combined with a review of relevant literature to address the primary objectives of the project. The lack of finding data related to processes has more implications for the quality and quantity of research on outcomes for youth with serious emotional disturbances than it has to do with the conceptual inadequacies of the model.

The general process for identifying and placing youth in programs for serious emotional disturbances is well known. This process begins with observing social and academic behaviors that are consistent with the definition of youth with serious emotional disturbances and leads to a more detailed assessment that is used by the multi-disciplinarian team to decide if there is a disability and which type of educational placement is most appropriate.

The in-school and post-school outcomes are also fairly well known mainly due to the efforts of the National Longitudinal Transition Studies and some other more local studies. These youth appear to be in the near normal range of intelligence, have below grade achievement levels on reading and math, have a grade point average of C - (1.7 on a 4-point scale), miss more school days per year, are retained in a grade more often than other youth with disabilities, and are more likely to be educated in a separate classroom or facility. They tend to drop out of school more often than other youth with disabilities, have only about a 50 percent employment rate, and do not attend post-secondary education settings. By the time they have been out of school 3-5 years, a majority of them will have an arrest record.

Effect of Processes on Outcomes: The Missing Link

The available data on outcomes for minority youth with serious emotional disturbances are largely descriptive and based on few studies. These data have their own variability and require scrutiny. The lack of studies restricts the conclusions that can be drawn between processes and their impact upon in-school and post-school outcomes.

The impact of graduating from high school, however, did suggest some very encouraging trends. Most studies found that youth with serious emotional disturbances who graduated from high school have higher rates of employment and attendance at post-secondary education. Two meta-analyses suggested that youth with serious emotional disturbances benefit from special education especially in terms of controlling behavior. And programs that have a behavioral orientation appear to be better at controlling behavior. There was no data about which programs are more likely to increase graduation rates, decrease arrest rates, and increase rates of employment. There is no research that has adequately examined the relationship between the processes for youth with serious emotional disturbances and family, linkages to community resources, or school and community demographics.

Competing Explanations for Differences Associated With Ethnic Groups

The issue of race, culture, and ethnic group membership was specifically addressed because there was a concern that the public schools have not served as an unbiased system for educating all the youth of this nation regardless of their cultural, ethnic, or racial backgrounds (e.g., Harry, 1994; Irvine, 1990; Ogbu, 1986). There is widespread belief among minority groups that a Eurocentric approach with its emphasis on white ethnic groups has resulted in policies and decisions that favor white youth at the expense of the children from nonwhite cultures, races, and ethnic groups. The charge of racism and its impact on special education was specifically addressed by Reschly (1988), Artiles and Trent (1994), Trent and Artiles (1995), and Harry (1992, 1994).

These arguments were based on the ratios of representation of different ethnic groups in special education in comparison to their ratio within the general population. The rate of representation for ethnic groups does not come from the Annual State Child Counts submitted to Office of Special Education but comes from the Department of Education Office of Civil Right's (OCR) survey and from the National Longitudinal Transition Study (e.g., Wagner et al., 1991). Rather than have ethnic information in the Annual State Child Counts, the OCR survey samples a proportion of schools at certain intervals. The latest data cited in this report was from the 1990 OCR Survey published in 1992. The OCR does not routinely publish reports, but raw data are available from the OCR. The National Longitudinal Transition Study (Wagner et al., 1991) study was based on a sample of parents of 8,000 plus students who were ages 13 to 21 in the 1985-86 school year. For both sources, the typical ethnic group membership was asked of the sample. The OCR data are the most typical source cited. Given the importance of this area, there appears to be a need for a more comprehensive data base with regular reports on special education and minority group membership.

It was also clear from the reviews that race as a biological term reflecting an inherited pattern of behavior, aptitude, and skills is simply not a logical concept. The arguments reviewed in this study citing the mixture of racial characteristics over time and the existence of distinct cultures within Census Bureau ethnic categories would seem to invalidate race as singular factor for explaining differences among ethnic groups. Ethnicity appears to be a more accurate term for the differences in sociohistory and identity as a group, language, and culture. Current categories for identifying ethnicity are inadequate and the terms "African American," "Hispanic," "Asian/Pacific Islander," and "Native American" do not accurately reflect the variety of cultures found in these categories. In this study, the phrase "ethnic groups" was attached to race categories to reflect the diversity of ethnic groups within these categories.

It was found that the rate of representation in programs for serious emotional disturbances for Hispanic and Asian/Pacific Islander ethnic groups were *proportionately less* than their rates in the general population. The proportionate rates for Native American ethnic groups and white ethnic groups in school programs for serious emotional disturbance were *approximately equal* to their rates in the general population. And the rate for African American ethnic groups in these school programs were *proportionately greater* than their rate in the general population.

Given that the rate of representation is higher or lower than the general population for certain ethnic groups, it is important to examine what assumptions are being made about the prejudicial interpretation of "over" and "under" representation. Many writers (e.g., Artiles & Trent, 1994; Harry, 1992) refer to this as "under- and overrepresentation." Such a terminology tends to reinforce the assumption that the rate of representation is in error because it is not the same as that of the general population. That is, minority groups are "over" or "under" represented in programs for youth with serious emotional disturbances based on faulty decision making.

It is also apparently assumed that being placed in a program for youth with serious emotional disturbances is undesirable since statistics that show greater representation than in the general population are cited as an example of racial prejudices. In underrepresentation, there appears to be two different assumptions about prejudicial actions. One interpretation of underrepresentation is that it is the reverse of discrimination in that a lower rate means that the group received a favor by not being included in program for youth with serious emotional disturbances. Another interpretation of underrepresentation is that it is another example of discrimination in that minority students may be denied services for a variety of reasons (costs, discipline issues, and legal concerns).

It was argued that these discriminatory practices are wide spread and their effect, especially for African and Native American youth, have been over several hundred of years. Such discrimination could have created a class system in the United States' society (i.e., castelike minority status for African American and Native American youth) in which members of the ethnic group are denied equal access to the same opportunities as the dominant ethnic group.

Most frequently, "over" representation of African American youth is cited as evidence of discrimination (negative bias) and "under" representation is considered a positive bias when applied to Asian/Pacific Islander youth. This explanation is but one hypothesis about what the differences in rates of ethnic groups in special education really mean. Several other interpretations are viable alternatives, but the existence of alternative hypotheses does not mean that the racial bias hypothesis is invalid. Each of the hypotheses should be examined for their potential influence, and it is possible that there is more than one of these potential factors influencing the rates.

The first alternative hypothesis is that the rates are really invalid and there is no differential representation for minority groups (lower or higher) in comparison to their rates within the general student body. The data in favor of this show a wide variation in state data and the fact that OCR data uses a sample rather than counts of all schools. The data against this argument show a consistent finding of differential rates over the years and a similar finding, for example, in ethnic data from the Rehabilitation Services Administration on vocational rehabilitation clients.

Another alternative hypothesis is that with certain minority groups there is a misunderstanding of the norms and behaviors of ethnic groups, and this lack of culture competency causes such youth to be falsely placed with regard to the assessed absence or presence of this information. In this case, there is not prejudging based on ethnic characteristics, but a misinterpretation of certain cultural behaviors and/or the use of tests that are not valid because their method for measuring factors are not phrased appropriately for non-white ethnic groups. This hypothesis is not one about prejudices, but lack of technical competency about specific cultural behaviors and expressions. The body of literature on cultural competencies and the theories of the different world view of various ethnic groups supports this hypothesis. The differences in rates of representation for various ethnic groups raises questions about why this factor would not equally affect all non-white ethnic groups.

The potential influence of environmental conditions associated with ethnic group membership is the essence of another hypothesis about difference in the prevalence rates and outcomes for minority youth with serious emotional disturbances. It is hypothesized that any ethnic group exposed to negative conditions would have increased rates and those exposed to positive conditions would have decreased rates. The data from the National Longitudinal Transition Study (Wagner et al., 1991) on the influence of socioeconomic status, parent education, and family structure suggest that African American families are exposed to more negative factors. The National Longitudinal Transition Study and Bahr et al. (1991) also suggested that poor academic achievement of African American youth may also play a factor.

Research data are lacking to determine the extent to which of the competing hypothesis are valid or invalid. The question of whether the students' needs are met does not appear to be the prime concern nor whether over- and under-representation are valid rates. The perception of prejudices in and of itself can cause damage. It would seem that there are sufficient research techniques to confirm or deny these charges and that it should be a high research priority to determine the impact and sources of such discrimination and the potential influence of other factors such as academic performance, school behavior, and socioeconomic status.

Development of a Research Agenda

This project examined the research base on outcomes and programs for minority youth with serious emotional disturbances and found this base inadequate for achieving the objectives of the study to make recommendation to parents and teachers about the adoption of specific practices. There were no studies that examined the relationship of outcomes to specific practices and techniques within special education programs for minority youth with serious emotional disturbances. In the case of differential rates of representation for minority youth, the research could not separate the influence of several equally plausible explanations.

While there are emerging models and potential solutions, there is a need to develop a consensus about which outcomes are important, how to design research to examine the processes, and how to use the resulting data to affect change within the schools. There is a need for developing a research agenda on programs for youth with serious emotional disturbances.

It is recommended that the following three areas be given a high priority for funding research studies through the Office of Special Education.

Validity and Reliability Measurement

Despite 25 years of concern about the impact of ethnic group membership and equality of education, the current measurement system for categorizing ethnic group membership is subject to significant concerns about validity and reliability of the data. The only continuing source of data is through the Office of Civil Rights within the Department of Education. Unlike the annual child counts submitted by all schools through their state education agency, the OCR data are samples rather than a full count. It is recommended that the Office of Special Education add ethnic group membership to the annual child counts.

Secondly, the categories for ethnic group membership confuse race and ethnic group members. Racial information is a biological concept and does not convey the same information that ethnic group membership does about the culture of different groups. The Office of Special Education needs to develop a reasonable list of ethnic groups that would tie to specific information about the culture of ethnic groups. This information would assist teachers and parents to develop culturally competent techniques about each ethnic group and promote awareness and acceptance of diversity.

Factors Correlated With Ethnic Group Membership

Even if all potential error were eliminated, the cause for differences in incidence rates and outcomes for various ethnic youth with serious emotional disturbances could be attributed to several sources based on competing theories about racial prejudices, lack of cultural competencies by staff and decision makers, socioeconomic conditions, long-term effects of social class status, or other conditions. Given that some minority ethnic groups do better than others, it should be evident that minority group membership in and of itself is not a predictor of placement in special education nor of poor outcomes. There needs to be a balanced approach where the potential influence of racial biases and cultural competency are fully recognized as well as the potential influence of socioeconomic factors, urban/suburban/rural, social class concept, etc. While some of these conditions may be influential factors in erroneous identification and placement, others may actually increase or decrease the incidence of serious emotional disturbances in youth. None of these hypotheses can be ignored in the search for empirical answers to this controversial issue.

Outcomes From Special Education

The original intent of the project was to make recommendations to parents and teachers about which programs are more effective for achieving better outcomes for minority youth with serious emotional disturbances. Data were lacking to make specific recommendations to parents and teachers based on a careful analysis of the empirical studies. The education and parenting of youth are difficult tasks, and they become even more difficult when there is a disability involved. The process is a complex one in which the involvement of the family, peers, and community resources is believed to be an intricate part of providing comprehensive education and treatment. This review suggested that there are basic principles that have been written about, where their effectiveness is assumed but not proved with this target population: (a) cultural competency, (b) elimination of prejudices and bias in the process, (c) parent and youth involvement in the treatment plan, (d) a seamless delivery process through integration with community resources, and (e) an individualized education and treatment plan based on the individual, family, and community.

While the rate of representation for ethnic groups is an important issue, it must not detract from pursuing the study of the effectiveness of these programs on post-secondary outcomes for youth of all ethnic groups. The lack of specific information on how to develop such programs based on tested practices and the lack of addressing the potential influences outside the classroom demonstrate the need for an agenda of research that will resolve the large gaps in the knowledge base about the effectiveness of programs upon outcomes for youth with serious emotional disturbances.

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School Outcomes and Community Benefits for Minority Youth With Serious Emotional Disturbances: A Synthesis of the Research Literature

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Appendix A

Concerns Under the Seven Consolidated Topic Areas

Problem Areas Identified by Constituents

Forty-one different research hypotheses were identified and were grouped under seven distinct areas. The first six areas are prioritized; the seventh area cuts across areas one through six. The seven areas, with representative hypothesis, follow:

1. Interventions and Curriculum

   General Concerns: What are the shared characteristics of effective techniques? What are positive outcomes in academic and non-academic areas? Are these outcomes more positive if parents and community resource professionals are involved? Do cultural specific treatments affect outcomes? How do different approaches relate to outcomes? How do school-wide strategies and policies and funding decisions affect outcomes? Does early intervention affect outcomes? How well are programs implemented?

2. Families

   General Concerns: Family involvement and treatment would appear to be necessary to success. How are schools involving the family in the key areas of assessment and treatment? Do school personnel have the skills to involve families from different ethnic backgrounds? What are effective models of parent-family collaboration?

3. Identification, Screening, Referral, Assessment, and Placement

   General Concerns: How are youth identified as having SED characteristics, how reliable is the screening process, what resources are used in referral and assessment, and where are they placed? Are these processes culturally biased? How are families involved, and how are mental health and other providers included in these processes? Are team approaches more effective? What impact does early identification have? What are the prevalence rates for different cultural/racial groups, and how do socioeconomic factors affect identification and placement?

4. Community Involvement/Linkages

   General Concerns: Schools are not the primary therapeutic treatment modality and yet there is not a consistent involvement of other professionals, especially mental health personnel, in the school system. Are there effective ways to involve these professionals to augment the school-based program? Are outcomes more positive when these professionals are involved? Do different barriers exist in accessing services for different racial or cultural groups?

5. Policies, Regulations, and Financing

   General Concerns: How do we influence policies at the local level and other levels? What effect do school-wide regulations have on outcomes and program development? How do we finance effective programs? How do policies affect outcomes?

6. Personnel Training and Competencies

   General Concerns: What are the needed competencies (knowledge, skills, and abilities)? Are staff trained in cultural appropriate techniques? Do staff know how to involve the family and access community providers? What curriculum is needed for in-service and pre-service programs? Does anti-bias/cultural training affect outcomes positively?

7. Dissemination, Utilization, and Application

General Concerns: Information needs to be packaged in such a way that teachers and parents can readily use the information. The information needs to be written in non-research formats and use culturally appropriate and linguistically correct language. This area was not ranked last, but was considered an integral part of the process and outcome of the project.

All 41 hypotheses were placed into one or more of the seven categories. Interventions and curriculum had the highest number of questions (21) and policies, regulations, and financing had the fewest questions (7). For a copy of the actual questions and other notes from this meeting, send a request to the Research and Training Center, University of Wisconsin-Stout, Menomonie, Wisconsin 54751. Ask for a copy of Appendix B: Hypotheses and Content Areas for this project submitted on April 3, 1995, to Division of Innovation and Development, Project Officer, Jane Hauser.

Appendix B

The
Code Book

CODE BOOK

- Master Record for Reference
- Demographics for Total or Subsample
- Statistical Effect Files

Charles C. Coker, Ph.D.
Principal Investigator
Research and Training Center • University of Wisconsin-Stout
Menomonie, Wisconsin 54751

Handbook for Coding
Master Record for Reference

Master.DBF **Master.SCR** **Master.FRM**

General Information

Reference ID Code: xxx
Short Title: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx No
Descriptor: xxxxxxxxxxxxxxxxxxx Copy: x

Complete APA Citation: (Memo Field) Abstract: (Memo field)

First Four Authors: xxxxxxx xxxxxxx
xxxxxxx xxxxxxx
Date: xxxx Source: xxxxxxx Reference Type: xx

Source's List of Key Words:
xxxxxxxxxxx

Expanded List of Key Words:
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Key Outcomes for Document Inclusion:

	I. In-School		II. Post-School
x	A. LRE	x	A. Employment
x	B. Attendance	x	B. Education
x	C. Graduate	x	C. Arrest
x	D. Drop Out	x	D. Community Living
x	E. Arrest	x	E. General Success
x	F. Other Specify:	x	F. Other Specify:

III. Mental Health x
Specify:

IV. Other x
Specify:

Minority Information: (Memo Field) Minority Code: x

Educational Practice or Strategy

Educational Practice Codes (From Code Book): xxx

General Areas	Place a '1' in Column
1. Identification and Assessment	x
2. Classification and Placement	x
3. Remediation and Services	x

Moderator Variables
Place a '1' if in this area

Process:		Process:	
Family/Parents:	x	School Wide Strategies:	x
Race/Culture/Linguistics:	x		
School/Community Services:	x	Community Demographics:	x

Comments and Memos

Research Methodology Code: xx Description (Below):
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Discussion Points: (Memo Field) Discussion Content Code: xx

Conclusions: (Memo Field) Conclusion Content Code: xx

Number of Demographic Forms: xx Number of Effect Forms: xx

Database Structure

Structure for database: C:\SEDATA\MASTER\MASTER.DBF

Field/Field Name	Type	Width	Dec	Index
1 CITE_COD	Numeric	4		N
2 CITE_TXT	Character	20		N
3 CITATION	Memo	10		N
4 AUTHOR1	Character	35		N
5 AUTHOR2	Character	35		N
6 AUTHOR3	Character	35		N
7 AUTHOR4	Character	35		N
8 PUB_TITL	Character	50		N
9 PUB_DATE	Character	15		N
10 PUB_TYPE	Character	2		N
11 PUB_SOUR	Character	50		N
12 K_WD1	Character	100		N
13 K_WD2	Character	100		N
14 IA_CODE	Numeric	1		N
15 IB_CODE	Numeric	1		N
16 IC_CODE	Numeric	1		N
17 ID_CODE	Numeric	1		N
18 IE_CODE	Numeric	1		N
19 IF_OTHER	Numeric	1		N
20 IF_TEXT	Character	15		N
21 IIA_CODE	Numeric	1		N
22 IIB_CODE	Numeric	1		N
23 IIC_CODE	Numeric	1		N
24 IID_CODE	Numeric	1		N
25 IIE_CODE	Numeric	1		N
26 IIF_OTHER	Numeric	1		N
27 IIF_TEXT	Character	15		N
28 III_MH	Numeric	1		N
29 III_MHTEXT	Character	15		N
30 IV_OTHER	Numeric	1		N
31 IV_TEXT	Character	15		N
32 MINORITY	Memo	10		N
33 MIN_CDE	Character	2		N
34 ABSTRACT	Memo	10		N
35 ED_CODE	Character	3		N
36 IDENT1	Numeric	1		N
37 LRE2	Numeric	1		N
38 REMDTN3	Numeric	1		N
39 FAM4	Numeric	1		N
40 RACE5	Numeric	1		N

200

Field/Field Name		Type	Width	Dec	Index
41	LINKS6	Numeric	1		N
42	S_WIDE7	Numeric	1		N
43	C_DEMOG8	Numeric	1		N
44	RES_METH	Character	2		N
45	RES_DESN	Character	100		N
46	RES CRIT	Memo	10		N
47	EFFECT_FRM	Character	3		N
48	DEMOG_FRM	Character	3		N
49	DISCUSSION	Memo	10		N
50	DISC_CDE	Character	2		N
51	CONCLUSION	Memo	10		N
52	CONC_CDE	Character	2		N
53	NO_COPY	Character	1		N

CODING INSTRUCTIONS
Master Record for Reference

GENERAL INFORMATION

Form: **Reference ID Code**
DBField: *Cite_Cod* *Numeric* *4*
Coding Instructions:
Enter 3 digit article identification number for use on all coding panels for this reference.

Form: **Short Title**
DBField: *Pub_Titl* *Character* *50*
Coding Instructions:
Give the abbreviated title which fits in the field.

Form: **Descriptor**
DBField: *Cite_Txt* *Character* *20*
Coding Instructions:
Select a single word or phrase from the brief title that will be used as a link to other files for this article and a quick reference to main content of this article.

Form: **No Copy**
DBField: *No_Copy* *Character* *1*
Coding Instructions:
Place an "x" in this box if there is no copy of the document in the files.

Form: **APA Reference Citation**
DBField: *Citation* *Memo* *10*
Coding Instructions:
Memo field for entering complete APA style citation.

Form: **Abstract**
DBField: *Abstract* *Memo* *10*
Coding Instructions:
Memo field for entering abstract from article.

Form: **First Four Authors**
DBField: *Author1/Author2/Author3/Author4* *Character* *35 each*
Coding Instructions:
List the first four authors for searching purposes.

Form: **Date**
DBField: *Pub_Date* *Character* *15*
Coding Instructions:
List the year of the publication or more information as given: month\day\year.

Form: **Source**
DBField: ***Pub_Sour*** ***Character*** ***50***
Coding Instructions:
List source of publication for easier finding of important journals.
Optional:

End with a code for where the article was obtained if available: SED Quarterly (a)
(a) First Search Data Base
(b) From references of reviewed article
(c) Government Publication Offices - Eau Claire, etc.
(d) Colleagues
(e) Others: specify (e.g., existing article from original grant)

Form: **Reference type**
DBField: ***Pub_Type*** ***Character*** ***2***
Coding Instructions:
Publication Types: list of codes a-j

a	book/book chapter
b	journal article
c	technical report
d	ERIC document
e	project report
f	conference presentation
g	unpublished manuscript
h	newsletter
i	government report/census study
j	other

KEY WORDS

Form: **Author's list of key words**
DBField: ***K_WD1*** ***Character*** ***100***
Coding Instructions:
Enter author's list of key words from article.

Form: **Additional working list of key words**
DBField: ***K_WD2*** ***Character*** ***100***
Coding Instructions:
Determine additional key words related to grant from Keyword list.

Form: **Key Outcomes for Document Inclusion**
DBFields: ***IA-IF/IIA-IIF/III_MH/III_MHTEXT/IV_Other/IV_Text***
Coding Instructions:
Use the following terms for Areas I and II:

- I. In School
  - A. LRE - Movement within school least restrictive setting.
  - B. Attendance
  - C. Graduate
  - D. Drop Out
  - E. Arrest
  - F. Other - then specify on form
- II. Post School
  - A. Employment
  - B. Post Secondary Education
  - C. Arrest/Incarceration
  - D. Living Arrangements
  - E. General Post School Success
  - F. Other- then specify on form
- III. Mental Health: Check Area III and specify area on form
- IV. Other: Check Area IV and specify area on form

Form: **Minority Information**
DBField: Minority ***Memo*** ***10***
Coding Instructions:
Provide information on what areas the article deals with on minority issues regardless of its relationship to SED. Describe any data which is to be coded.

Form: **Minority Content Code**
DBField: Min_Cde ***Character*** ***2***
Coding Instructions:
After all minority information is reviewed code for the type of information provided on minority issues (data, discussion, reviews, etc.) according to codes table to be developed.

EDUCATIONAL PRACTICE OR STRATEGY

Form: **Educational Practice Code**
DBField: Ed_Pract ***Character*** ***3***
Coding Instructions:
Assign up to a three-letter/number code for the educational practice according to the below coding scheme. After selecting an educational practice, complete the remainder of the form. Complete one form for each educational practice identified.
For example, A2b = absenteeism, D5 = math skills, k4c = early intervention, etc.

A. Identification and Assessment

1. General Academic Skills
    - A. Study Skills
    - B. Reading Skills
    - C. Writing Skills
    - D. Spelling Skills
    - E. Math Skills
    - F. Other: (code as other and describe on coding sheet)
2. General Social Interactions
    - A. Vandalism
    - B. Absenteeism
    - C. Stealing
    - D. Honesty, Lying, Cheating
    - E. Swearing
    - F. Other: (code as other and describe on coding sheet)
3. General Interpersonal Relationships
    - A. Violence and Aggressions
    - B. Verbal Abuse
    - C. Sexual
    - D. Other: (code as other and describe on coding sheet)
4. General Intrapersonal Adjustment
    - A. Addictive Behavior
    - B. Depression
    - C. Attention Problems
    - D. Anger
    - E. Phobias
    - F. Other: (code as other and describe on coding sheet)

B. Classification

1. Population was cited as having problems in:
    - A. Academic Skills
    - B. Social Interactions
    - C. Interpersonal Relationships
    - D. Intrapersonal Adjustment
2. Diagnostic Labels
    - A. Conduct Disorder
    - B. Depression
    - C. Psychotic
    - D. Other: (code as other and describe on coding sheet)

C. Type of Educational Placement Environment

1. Regular Education
2. Mainstreamed
3. Resource Room
4. Separate Classroom

5. Alternative School Program
6. Out of School District
7. Day Treatment
8. Day/Residential Placement
9. Juvenile/Corrections
10. Out of Home Placement
    - A. Out of home - foster placement
    - B. Out of home - mental health facilities
    - C. Out of state - specialized facilities
11. Not in System
12. Other: (specify on coding sheet as 13 and describe)

D. Academic Treatment for Improving

1. Study Skills
2. Reading Skills
3. Writing Skills
4. Spelling Skills
5. Math Skills
6. General Academic Skills
7. Other: (code as other and describe on coding sheet)

E. Social Skills, Transition, and Other Training

1. Social Skills
2. Transition From School to Work
3. Other: (code as other and describe on coding sheet)

F. Educational Strategies

1. Peer Tutoring
2. Cooperative Learning
3. Direct Instruction
4. Other: (code as other and describe on coding sheet)

G. Behavioral Interventions Primary

1. Behavior Reduction Techniques
2. Behavior Enhancement Techniques
3. Self Monitoring Applications
4. Self Correction
5. Other: (code as other and describe on coding sheet)

H. Cognitive-Emotional Primary

1. Social Cognitive
2. Cognitive-Behavioral
3. Other: (code as other and describe on coding sheet)

I. Vocational Courses/Employment
1. Vocational courses complete
2. Employment while in school
3. Other: (code as other and describe in comment section)

J. Types of Treatments Received in School and Community Linkages (non-classroom)
1. School based
2. Home
3. Community
4. Mental Health Programs
5. Other: (code as other and describe in comment section)

K. Moderator Variable as Educational Practices
1. Family
2. Race/Culture/Linguistics
3. Community Linkages
4. School Wide Strategies Cited
    A. Inclusionary School
    B. Mainstream Assistance Teams
    C. Early Intervention
    D. Alternative Education
    E. Consultation Models
    Z. Other: (code as other and describe in comment field)
5. School/Community Climate
    A. Urban/Rural
    B. School Size
    C. Number of SED Teachers
    D. Socioeconomic status
    Z. Other: (code as other and describe in comment field)

General Areas

Form: Identification and Assessment
DBField: IDENT1 ***Numeric*** ***1***
Coding Instructions:
Place a "1" if the practice relates to the general processes of identifying or assessing the youth for SED.

Form: Classification and Placement
DBField: LRE2 ***Numeric*** ***1***
Coding Instructions:
Place a "1" if the practice relates to the general processes of classifying or placing the youth in a program for SED.

Form: Remediation and Services
DBField: REMDTN3 *Numeric* *1*
Coding Instructions:
Place a "1" if the practice relates to the general processes of providing remedial education, school based treatment, residential services, or community based treatment services.

Moderator Variables

Form: Family/Parents
DBField: Fam4 *Numeric* *1*
Coding Instructions:
Place a "1" if the study substanitally deals with family/parents in the process.

Form: Race/Culture/Linguistic
DBField: Race5 *Numeric* *1*
Coding Instructions:
Place a "1" if the study substanitally deals with race/culture/linguistics in the process

Form: School Community Services
DBField: Links6 *Numeric* *1*
Coding Instructions:
Place a "1" if the study substanitally deals with community linkages in the process

Form: School Wide Strategy
DB Field: S_WIDE7 *Numeric* *1*
Coding Instructions:
Place a "1" if the study substanitally deals with school wide apporaches in the process

Form: Community Demographics
DBField: C_DEMOG8 *Numeric* *1*
Coding Instructions:
Place a "1" if the study substanitally deals with community demographcis in the process

COMMENT AND MEMOS

Form: Code
DBField: Res_Meth *Character* *2*
Coding Instructions: Use the following Codes
a = Narrative - no original data
1. Position paper or advocacy
2. Literature Review
3. Program/Project Description
4. Review of Program/Project

5. Policy Analysis
6. Others

b=Descriptive summary report - original descriptive data, census, national stats

1. Prevalence rates, statistics, or norms (national, state, or local)
2. Outcome from Program/Project (no statistical comparison)
3. Outcome data from research report

c = Comparison - inferential statistics (t-test, F-test, chi-square, r, etc.)

t	Two group comparison with continuous dependent variable (e.g., T-test)
c	Two group comparison with discontinuous dependent variable (e.g., chi-square)
r	Two continuous varaibles (e.g, correlation)
m	Factorial analyses of discontinous dependent measures (e.g., mann-whitney)
f	Factorial group comparisons of continuous data (e.g., F-Test)
n	Single subject design or case study
x	Other (factor analyses, multiple regression, etc.):____________________
	b=Descriptive summary report - original descriptive data, census, national stats

Form: Description (of Methodology)
DBField: Res_Desn ***Character*** ***100***
Coding Instructions:
Description of design for review purposes and specifying need for further coding. Intended to be a formal statement about research methodology that is subject to verification by external review for decisions about the coding structure and decisions. Could be subject to additional coding by adding another field with a list of coding decisions.

Form: Discussion Points
DBField: Discussion ***Memo*** ***10***
Coding Instructions:
Summarize the discussion points relative to the issues.

Form: Discussion Content Code
DBField: Conclusion ***Character*** ***2***
Coding Instructions:

Form: Conclusions
DBField: Conclusion ***Memo*** ***10***
Coding Instructions:
List the conclusions made by the authors. Add comments if desired.

Form: Number of Demographic Forms
DBField: DEMOG_FRM ***Numeric*** ***2***
Coding Instructions:
Enter the number of different forms filled out for the different demographic chartactetriustcis of the populations samples tied to each of the effect forms.

Form: **Number of Effect Forms**
DBField: EFFECT_FRM ***Numeric*** ***2***
Coding Instructions:

Enter the number of different forms filled out for each analysis form the bases for a size of effect value.

Handbook for Coding
Demographics for Total or Subsample

Demog.DBF **Demog.SCR**

ID Code: ____ Study Descriptor: ______________________.

STAT Type: __ ID # for Demographic set: __ Comments: (Memo)

Demographic Areas	**Experimental**		**Control**		**Totals**
	Code __	Label ________	Code __	Label ________	
Sex: Males Females Totals					
Age: Mean SD Sample Sizes					
Race: White Black Spanish Indian Asian Other Totals					
Grade Level: Code Mean High Low					

Database Structure

Structure for database: C:\SEDATA\MASTER\DEMOG.DBF

Number of data records:	2
Date of last update:	09/19/95

Field/Field Name		Type	Width	Dec	Index
1	CITE_COD	Numeric	3		Y
2	CITE_TXT	Character	20		N
3	STAT_TYP	Character	1		N
4	DEMOG_SEQ	Character	1		N
5	COMMENTS	Memo	10		N
6	EXPERMNTAL	Character	10		N
7	RX_CODE	Character	2		N
8	CONTROL	Character	10		N
9	C_CODE	Character	2		N
10	RX_SEX_M	Numeric	4		N
11	RX_SEX_F	Numeric	4		N
12	C_SEX_M	Numeric	4		N
13	C_SEX_F	Numeric	4		N
14	RX_SEX_MF	Numeric	4		N
15	C_SEX_M	Numeric	4		N
16	RX_SEX_F	Numeric	4		N
17	RX_C_SEX_F	Numeric	4		N
18	TOTAL_SEX	Numeric	4		N
19	RX_AGE_MN	Numeric	8	3	N
20	RX_AGE_SD	Numeric	8	3	N
21	RX_AGE_N	Numeric	4		N
22	C_AGE_MN	Numeric	8	3	N
23	C_AGE_SD	Numeric	8	3	N
24	C_AGE_N	Numeric	4		N
25	TTL_AGE_MN	Numeric	8	3	N
26	TTL_AGE_SD	Numeric	8	3	N
27	TTL_AGE_N	Numeric	4		N
28	RX_WH_N	Numeric	4		N
29	C_WH_N	Numeric	4		N
30	TTL_WH_N	Numeric	4		N
31	RX_BL_N	Numeric	4		N
32	C_BL_N	Numeric	4		N
33	TTL_BL_N	Numeric	4		N
34	RX_SP_N	Numeric	4		N
35	C_SP_N	Numeric	4		N
36	TTL_SP_N	Numeric	4		N
37	RX_IN_N	Numeric	4		N

Field/Field Name	Type	Width	Dec	Index
38 C_IN_N	Numeric	4		N
39 TTL_IN_N	Numeric	4		N
40 RX_AS_N	Numeric	4		N
41 C_AS_N	Numeric	4		N
42 TTL_AS_N	Numeric	4		N
43 RX_OT_N	Numeric	4		N
44 C_OT_N	Numeric	4		N
45 TTL_OT_N	Numeric	4		N
46 RXTTL_RAC	Numeric	4		N
47 CTTL_RAC	Numeric	4		N
48 TOTAL_RAC	Numeric	4		N
49 RX_GL_CODE	Character	1		N
50 C_GL_CODE	Character	1		N
51 TTL_GL_CDE	Character	1		N
52 RX_YR_MN	Numberic	8	3	N
53 C_YR_MN	Numeric	8	3	N
54 TTL_YR_MN	Numeric	8	3	N
55 RX_HI_GL	Character	8		N
56 RX_LOW_GL	Character	8		N
57 C_HI_GL	Character	8		N
58 C_LOW_GL	Character	8		N
59 TTL_HI_GL	Character	8		N
60 TTL_LOW_GL	Character	8		N
** Total **		315		

CODING INSTRUCTIONS
Demographics for Total Sample or Subsample

Demog.DBF **Demog.SCR**

Form: **ID Code**
DBField: *CITE_COD* *Numeric* *3*
Coding Instructions:
Enter 3 digit article identification number assigned in the Master file and to be used on all coding panels for any given article.

Form: **Study Descriptor**
DBField: *CITE_TXT* *Character* *20*
Coding Instructions:
Descriptor is the same as that used in the Master file for this field - keep it the same for all forms and multiple forms for any given article.

Form: **STAT Type**
DBField: *STAT_TYP* *Character* *1*
Coding Instructions:

d	Descriptive statistics of groups
t	Two group comparison with continuous dependent variable (e.g., T-test)
c	Two group comparison with discontinuous dependent variable (e.g., chi-square)
r	Two continuous variables (e.g, correlation)
m	Factorial analyses of discontinous dependent measures (e.g., mann-whitney)
f	Factorial group comparisons of continuous data (e.g., F-Test)
n	Single subject design or case study
x	Other - specify in comment memo field (factor analyses, multiple regression, etc.)

Form: **ID # for Demographic Set**
DBField: *Demog SEQ* *Character* *1*
Coding Instructions:
Gives a unique identification letter to the first set of demographic characteristics beginning with the letter A and subsequent sets B, C, D, etc.

Form: **Comments**
DBField: *Comments* *Memo* *10*
Coding Instructions:
Internal comments on research design for explaining coding and/or need for further information.

EXPERIMENTAL AND CONTROL

Form: Experimental Code Control Code
DBField: RX_Code C_Code
Coding Instructions:
Code according to type of Variable:

- I. In School
  - A. LRE - Movement within school least restrictive setting
  - B. Attendance
  - C. Graduate
  - D. Drop Out
  - E. Arrest
  - F. Other - then specify on form
- II. Post School
  - A. Employment
  - B. Post Secondary Education
  - C. Arrest/Incarceration
  - D. Living Arrangements
  - E. General Post School Success
  - F. Other- then specify on form
- III. Mental Health: Check Area III and specify area on form
- IV. Other: Check Area IV and specify area on form

Form: Experiemental and Control Labels
DBField: Expermental Control
Coding Instructions:
Record name for experimental or treatment group as given in source. Label code for the contrast or control group text name as given in the study. **Remember:**

Experimental or RX = Experimental or Treatment Group

E.G.: SED should always be the treatment group (versus general ed or other groups).
Dropouts (as opposed to graduates) are usually the treatment group.

Contol or C = Contrast Group or Control Group
General ED or other groups should be control or contrast group
Graduates (as opposed to dropouts should be the control)

E.g., White Graduates = Contrast or control
Black or Hispanic, etc. graduates = Experimental or Treatment
Graduates = Control or Contrast
Dropouts = Treatment or Experimental

		Experimental	Control	Totals
SEX				
	Males			
	Females			
	Totals			
DBField:		**RX_SEX_M**	**V_Sex_M**	**RX_C_Sex_M**
		RX_SEX_F	**V SEX_F**	**RX_C_SEX_F**
		RX_SEXMF	**V_SEX_MF**	**RX_C_SEX_MF**
				TOTAL_SEX

Coding Instructions:
Code frequencies of occurrence of gender in samples.

Form:

		Experimental	Control	Totals
AGE				
	MEAN			
	SD			
	Sample Sizes			
DBField:		**RX_AGE_MN**	**C_AGE_MN**	**TTL_AGE_M**
		RX_AGE_SD	**C_AGE_SD**	**TTL_AGE_S**
		RX_AGE_N	**C_AGE_N**	**TTL_AGE_N**

Coding Instructions:
Code means of ages for groups.

Form:

		Experimental	Control	Totals
RACE				
	White			
	Black			
	Spanish			
	Indian			
	Asian			
	Other			
	Total			
DBField:		*RX_WH_N*	*C_WH_N*	*TTL_WH_N*
		RX_BL_N	*C_BL_N*	*TTL_BL_N*
		RX_SP_N	*C_SP_N*	*TTL_SP_N*
		RX_IN_N	*C_IN_N*	*TTL_IN_N*
		RX_AS_N	*C_AS_N*	*TTL_IN_N*
		RX_OT_N	*C_OT_N*	*TTL_OT_N*
		RXTTL_RAC	*CTTL_RAC*	*TOTAL_RAC*

Coding Instructions:
Code frequencies of occurrence of race for each group

GRADE LEVEL

	Experimental	**Control**	**Totals**
Form: CODES			
DBField:	*RX_GL_CODE*	*C_GL_CODE*	*TTL_GL_CDE*

Coding Instructions:
Use following codes:
- A = Elementary
- B = Secondary
- C = Post Secondary
- D = Elementary and Secondary
- E = Secondary and Post Secondary
- Z = Other: make comment in memo field

Form: Mean
High
Low

DBField:	*RX_YR_MN*	*C_YR_MN*	*TTL_YR_MN*
	RX_HI_GL	*C_HI_GL*	*TTL_HI_GL*
	RX_LOW_GL	*C_LOW_GL*	*TTL_LOW_GL*

Coding Instructions:
Report mean, average, and range of grade levels if given, e.g., 6.3.

Handbook for Coding
Statistical Effect Files

Effect.DBF **Effect.SCR**

Doc ID Code: xx STAT Sequence #: xx STAT Type: xx Demo Sequence #: **xx**
Descriptor: Comments: (Memo Field)

Non-Parametric Analyses			
Row Categories Groups	**Column Outcome Categories Frequency Counts**		**Totals**
	Outcome Category 1 Code Label	Outcome Category 2 Code Label	
Group 1: Treatment Code: Label: XX XXXXX	XX XXXXX XXXXX	XX XXXXX XXXXX	XXXXX
Group 2: Contrast Code: Label: XX XXXXX	XXXXX	XXXXX	XXXXX
Column Totals	XXXXX	XXXXX	XXXXX

Parametric Comparisons				
Variable	**Group 1 (Treatment)**		**Group 2 (Control)**	
	Code	Label	Code	Label
	XX	XXXXX	XX	XXXXX
Means	XX	XXXXX	XX	XXXXX
Standard Deviations	XX	XXXXX	XX	XXXXX
Sample Size (N)	XX	XXXXX	XX	XXXXX

Summary of Statistical Information	**Values (Including Correlational Values)**			
	Non-Parametric	**T-test**	**F-test**	**R**
Test Description	-------------------------	XXXX	-----(only 1 test per	
Value		XXXX		form)
Total N		XXXX		
Degrees of Freedom (d.f.)		XXXX		
Probability Level		XXXX		
Size of Effect:	R-Index	D-Index	Transformed Index	
Value	XXXXX	XXXXX	XXXXX	
Formula Code	XX	XX	XX	
Notes:	(Memo Field)			

Database Structure

Structure for database: C:\SEDATA\EFFECT.DBF

Number of data records: 6
Date of last update: 10/04/95

Field/Field Name		Type	Width	Dec	Index
1	CITE_COD	Numeric	3		N
2	CITE_TXT	Character	20		N
3	STAT_SEQ	Character	1		N
4	DEMO_SEQ	Character	1		N
5	STAT_TYP	Character	1		N
6	COMMENTS	Memo	10		N
7	CAT_CDE_1	Character	2		N
8	CAT_LBL_1	Character	15		N
9	CAT_CDE_2	Character	2		N
10	CAT_LBL_2	Character	15		N
11	RX_CDE_1	Character	2		N
12	RX_LBL_1	Character	15		N
13	CTRL_CDE_2	Character	2		N
14	CTRL_LBL_2	Character	15		N
15	ROW1_COL1	Numeric	6		N
16	ROW1_COL2	Numeric	6		N
17	ROW1_TOTAL	Numeric	6		N
18	ROW2_COL1	Numeric	6		N
19	ROW2_COL2	Numeric	6		N
20	ROW2_TOTAL	Numeric	6		N
21	COL1_TOTAL	Numeric	6		N
22	COL2_TOTAL	Numeric	6		N
23	ROWCOL_SUM	Numeric	6		N
24	CDE_VARIBL	Character	2		N
25	LBL_VARIBL	Character	15		N
26	RX_TF_CDE	Character	2		N
27	RX_TF_LBL	Character	15		N
28	RX_MEAN	Numeric	10	3	N
29	RX_SD	Numeric	10	3	N
30	RX_N	Numeric	7		N
31	CTR_TF_CDE	Character	2		N
32	CTR_TF_LBL	Character	15		N
33	CTR_MEAN	Numeric	10	3	N
34	CTR_SD	Numeric	10	3	N
35	CTR_N	Numeric	7		N
36	TEST_LABEL	Character	10		N
37	CHI_VALUE	Numeric	8	3	N

Field/Field Name		Type	Width	Dec	Index
38	CHI_TOT_N	Numeric	8		N
39	CHI_DF	Numeric	6		N
40	CHI_PROB	Numeric	5	3	N
41	T_VALUE	Numeric	8	3	N
42	T_TOTAL_N	Numeric	8		N
43	T_DF	Numeric	6		N
44	T_PROB	Numeric	5	3	N
45	F_VALUE	Numeric	8	3	N
46	F_TOTAL_N	Numeric	8		N
47	F1_DF	Numeric	4		N
48	F2_DF	Numeric	4		N
49	F_PROB	Numeric	5	3	N
50	R_VALUE	Numeric	5	3	N
51	R_TOTAL_N	Numeric	8		N
52	R_DF	Numeric	6		N
53	R_PROB	Numeric	5	3	N
54	R_INDEX	Numeric	5	3	N
55	R_FORM_CDE	Character	2		N
56	D_INDEX	Numeric	5	3	N
57	D_FORM_CDE	Character	2		N
58	TRF_INDEX	Numeric	5	3	N
59	TR_FRM_CDE	Character	2		N
60	EFFECT_NTE	Memo	10		N
	** Total **		412		

CODING INSTRUCTIONS
Statistical Effect Coding

Effect.DBF

Form: Doc ID Code
DBField: CITE_COD Numeric 3
Coding Instructions:
Enter 3 digit article identification number to be used on all coding panels for the article.

Form: Descriptor
DBField: CITE_TXT Character 20
Coding Instructions:
Descriptor is the same as that used in the Master file for this field - keep it the same for all forms and multiple forms for any given article.

Form: Stat Sequence #
DBField: STAT_SEQ Character 1
Coding Instructions:
Assign a sequence number for each size of effect measure.

Form: Analysis Type
DBField: STAT_TYP Character 1
Coding Instructions: Use the following codes (same as demo form)

d	Descriptive statistics of groups
t	Two group comparison with continuous dependent variable (e.g., T-test)
c	Two group comparison with discontinuous dependent variable (e.g., chi-square)
r	Two continuous variables (e.g, correlation)
m	Factorial analyses of discontinous dependent measures (e.g., mann-whitney)
f	Factorial group comparisons of continuous data (e.g., F-Test)
n	Single subject design or case study
x	Other - specify in comment memo field (factor analyses, multiple regression, etc.)

Form: Demo Sequence #
DBField: DEMO_SEQ Character 1
Coding Instructions:
Use the demographics sequence number that describes the demographics for the analysis. The same demo number can apply to several analyses. If the demographics of the groups are different than the original or if this is another analysis within the same article, be sure to use a different demographic panel and use the demo sequence # for the effect form.

Form: Comments

DBField: *Comments* *Memo* *10*

Coding Instructions:

Provide detail on the type of comparison/contrast group and method for sample selection. Use the following outline for structure comments.

- A. Treatment Group versus experimental control/no treatment with subjects:
  1. Randomly assigned in both groups
  2. Random treatment/non-random control
  3. Non-random treatment/random control
  4. Neither treatment nor control group random
- B. Treatment Group versus experimental control/no treatment with subjects:
  1. Self selected for groups
  2. Teacher selection
  3. Other selections process
- C. Treatment Group versus baseline control group:
  1. Pre-Post test
  2. Prior Years groups
  3. Comprable School
- D. Target Group versus normative group:
  1. Local
  2. State
  3. National
- E. Target Group versus unspecified contrast group - Specify appropriate group:
- Z. Other (Specify)

Form:

CHI-SQUARE ANALYSIS **Column Categories (Criterion)**
Frequency Counts

Row Categories (Variate)	**Code Label**	**Code Label**	**Totals**
Group 1			
Code Label			
Group 2			
Code Label			
Totals			

DBField:

	Crt_Cde_1/CRT_Lbl_1	*Crt_Cde_2/ CRT_Lbl_2*	*Total*
Var_CD1/Var_Lbl1	*Row1_Col1*	*Row _ Col2*	*Row1_Total*
Var_CD2 /Var_Lbl2	*Row2_Col1*	*Row 2_Col2*	*Row2_Total*
	Col1_Total	*Col2 Total*	*RowCol_Sum*

Coding Instructions:

Code variables, groups and record labels for 2 x 2 chi-square. Give frequencies for cells.

Variable Code for Groups

I. In-School
- A. LRE Movement
- B. Attendance
- C. Graduate
- D. Drop Out
- E. Arrest
- F. Other In-School Variable

II. Post-School
- A. Employment
- B. Post-Secondary Education
- C. Arrests
- D. Community Living
- E. Success - Post-School
- F. Other - Post-School Variable

Variables Based on Treatment Contrasts (e.g.)

1. Contrast with Standard Practice: Innovative or experimental intervention versus "standard practice" which may be explicitly stated or assumed as the old, previous, or traditional.
2. Uses clear outcome status: Graduate versus dropouts
   Employed versus non-employed
3. Other: comment in **Notes** memo field

Type of Population Sample:

Treatment	**Versus Contrasts:**	
SED -All	General Education- All	Other Disability -All
SED Minority	General Education-Minority	Other Disability-Minority
SED - Other	General Education-Other	Other Disability-Other

FORM:

T-TEST/F-TEST DATA	**Criteria** **Code Label**	**Variate** **Code Label**
VARIABLE **CODE LABEL** **Means** **Standard Deviations** **Sample Sizes**		

DBField:

	Crt_TF_Cde/Crt_TF_Lbl	***Var_TF_Cde/Var_TF_Lbl***
Cde_Varibl/Lbl_Varibl		
	Crt_Mean	***Var_Mean***
	CRT_SD	***VAR_SD***
	CRT_N	***VAR_N***

Coding Instructions:

Code the variable according to the outcome variable list and describe the variable in the label field as given for chi-square above.

Form:

STATISTICAL SUMMARY VALUES

	Chi-Square	t-test	F-test	R
Test Description				
Value				
Total N				
Degrees of Freedom (d.f.)				
Probability Level				

DBField:

Test_Label	*Test_Label*	*Test_Label*	*Test_Label*
Chi_Value	*t_value*	*F_Value*	*R_Value*
Chi_Tot_N	*t_Tot_N*	*F_Tot_N*	*R_Tot_N*
Chi_df	*t_df*	*F_df*	*R-df*
Chi_Prob	*t_prob*	*F_prob*	*R-prob*

Coding Instructions:
Report the name of the statistical test in the test description. Give the value of the resulting test, total sample size, degrees of freedom, and the probability level.

Form:

Size of Effect:	D-Index	R-Index	Other Trans.
Formula Code			
Value			

DBField:

D_Form_CDE	*R_Form_Cde*	*TR_Frm_CDE*
D_Index	*R_Index*	*TRF_Index*

Coding Instructions:
Report the formula used to calculate the different indices and begin with the following list. Add to the list as different ones are used and describe in Notes memo field.

Formulae

A. Based on raw Means and sd (Cooper, 1989, page 101):
$d = (X_1 - X_2) / sd$ (= average sd or contrast group)
OR

B. Based on t-test (Cooper, 1989, page 102):
$d = 2\,t / \text{SQR of } df_{error}$

C. Chi-Square (r index) = SQR of [Chi-square / N]

D. Conversion Formulae

Chi-square conversion formula: r to d-index: $d = 2r / \text{SQR of } 1-r^2$
T-test Conversion Formula d to r-index: $r = d/\text{SQR of } (d^2 + 4)$
R conversion formula r to d-index: $d = 2r / \text{SQR of } (1 - r^2)$

Values (Direction of Results: Positive = Rx highest, Negative = Contrast highest)

Form: Notes:
DBField: Effect_nte ***Memo*** ***10***

Coding Instructions:
Provide all necessary detail about the calculation and meaning of the size of effect.

D. Conversion Formulae
Chi-square conversion formula: r to d-index: $d = 2r$ /SQR of $1-r^2$
T-test Conversion Formula d to r-index: $r = d$/SQR of $(d^2 + 4)$
R conversion formula r to d-index: $d = 2r$ /SQR of $(1 - r^2)$

Values (Direction of Results: Positive = Rx highest, Negative = Contrast highest)

Form: Notes:
DBField: Effect_nte ***Memo*** ***10***

Coding Instructions:
Provide all necessary detail about the calculation and meaning of the size of effect.

D. Conversion Formulae

Chi-square conversion formula: r to d-index: $d = 2r / \text{SQR of } 1 - r^2$

T-test Conversion Formula d to r-index: $r = d / \text{SQR of } (d^2 + 4)$

R conversion formula r to d-index: $d = 2r / \text{SQR of } (1 - r^2)$

Values (Direction of Results: Positive = Rx highest, Negative = Contrast highest)

Form: Notes:

DBField:* *Effect_nte* *Memo* *10

Coding Instructions:

Provide all necessary detail about the calculation and meaning of the size of effect.

D. Conversion Formulae

Chi-square conversion formula: r to d-index: $d= 2r$ /SQR of $1-r^2$

T-test Conversion Formula d to r-index: $r= d$/SQR of $(d^2 + 4)$

R conversion formula r to d-index: $d= 2r$ /SQR of $(1 - r^2)$

Values (Direction of Results: Positive = Rx highest, Negative = Contrast highest)

Form: Notes:

DBField: Effect_nte Memo 10

Coding Instructions:

Provide all necessary detail about the calculation and meaning of the size of effect.

D. Conversion Formulae
Chi-square conversion formula: r to d-index: $d= 2r$ /SQR of $1-r^2$
T-test Conversion Formula d to r-index: $r= d$/SQR of $(d^2 + 4)$
R conversion formula r to d-index: $d= 2r$ /SQR of $(1 - r^2)$

Values (Direction of Results: Positive = Rx highest, Negative = Contrast highest)

Form: Notes:
DBField:* *Effect_nte *Memo* *10*

Coding Instructions:
Provide all necessary detail about the calculation and meaning of the size of effect.